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ABSTRACT

Current information and advice on the seriousness of drug problems are contained in this revised edition published by the New Jersey Department of Education. As a reference booklet for teachers, it provides factual information on drugs, adolescent drug users, and effects of drug addiction. To give an understanding of the drug problem, the following topics are covered: historical background and drug related legislation; the extent of drug abuse throughout the country; habituation and dependence on drugs; drugs commonly abused; the roots of drug abuse; suspicion and recognition of drug users through general and specific symptoms; social effects of continued drug use; treatment and rehabilitation programs; and the role of the school. Appendices include a bibliography of books, pamphlets, films, information sources, and a glossary of terms and slang names for drugs. (BI)

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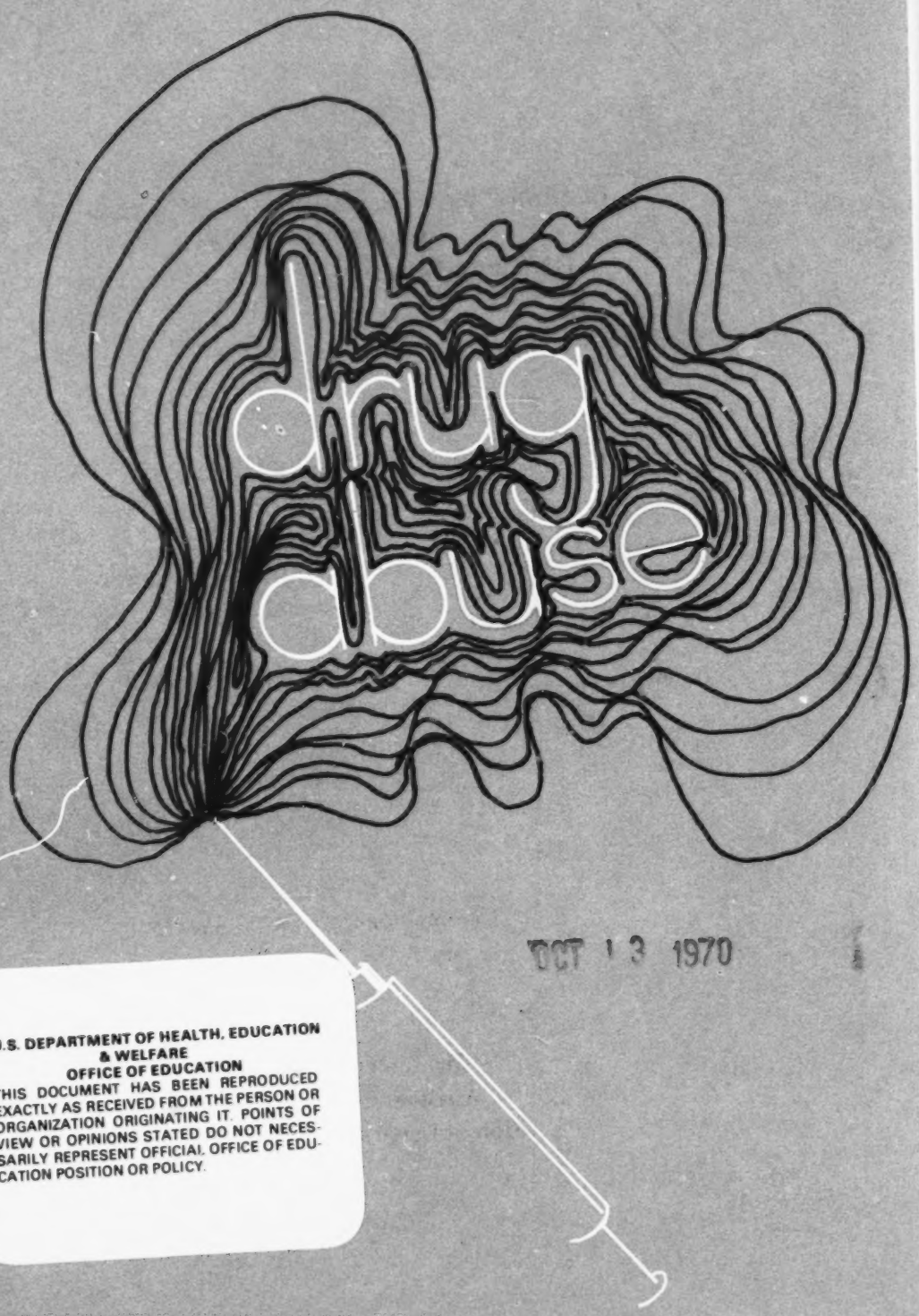

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A REFERENCE FOR TEACHERS

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DRUG ABUSE

A Reference for Teachers

A Reference for Teachers

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ACKNOWLEDGEMENTS

This revised publication is an attempt by the Office of Health, Safety and Physical Education of the New Jersey Department of Education to provide the schools of our State with current information and advice on the seriousness of the drug problem. It is based on material originally prepared by Bernard Millner, M.D., Alfred Richlan, M.D., Dr. Randolph E. Edwards and Dr. Marvin Levy.

Credits must be extended to many persons for their assistance and encouragement in the original publication, Drug Abuse – A Reference for Teachers. The 1969 revision has been expanded to include information about the new Public Law 89-793, new types of drugs being used, new terminology of slang in names of drugs, school board policies and other added information for a clearer understanding of the drug problem.

Sincere appreciation is extended to Mr. William Burcat, Supervisor of Health and Safety Education of the Office of Health, Safety and Physical Education, Department of Education, for his time and efforts in revising this publication and for adding a variety of new suggestions to improve communication between teacher and pupil.

Everett L. Hebel, Director
Office of Health, Safety and Physical Education

INTRODUCTION

Drug abuse and its consequences on the health and well being of people is nothing new. It has probably been a scourge of mankind for longer than recorded history. Narcotic abuse in the United States reached its zenith prior to 1914 when federal legislation was first initiated to curb the rising tide. Since then, narcotic abuse rates declined markedly. Statistics, however, do not tell the entire story. They do not reflect the mushrooming abuse of other dangerous and harmful substances and fail to reveal the growing incidence of such abuses among the generation presently in schools and colleges.

Piecemeal information is readily available. Mass media communication forms are replete with incidents of drug abuse, particularly those involving young people. These are often inaccurate, bizarre and sensational thereby creating many misconceptions which are frightening and destructive.

Educators need not be preoccupied with drug abuse and are probably alert to the possibility of their students taking drugs. What they do need is some sober, factual and official corrective to the mass of hysterical misinformation which they have heard and read.

The cardinal purpose of this document then, is to provide educators with knowledge; that this knowledge will relieve much of whatever sense of inadequacy and frustration they may now be experiencing and that a mood of increased calm and objectivity in this area, throughout the school system, will contribute to a more rational handling of the problem.

CHAPTER I

HISTORICAL BACKGROUND

Records of the use of drugs date back 7,000 years, and are written in the language of the Sumerians, who lived in Mesopotamia (now Iraq). Archeological findings indicate that this was probably the original home of the opium poppy.

Knowledge of opium was evident throughout the early Egyptian and Persian kingdoms, some 1,000 years before Christ. Opium is listed on Assyrian medical tablets dating to the seventh century B.C. And in the fourth century B.C., Hippocrates, the Greek physician, recommended the juice of the poppy as a cure for many illnesses.

Early Arabian physicians prescribed it for headaches and other complaints. It was used as a liniment for bruises and strains, as well as orally.

Arab camel trains, in about 900 A.D., carried the products of the poppy into Asia Minor and other parts of the world. In this way opium was introduced into India and China, where it was used in the treatment of dysentery and diseases of the eyes. After the opening of a sea route to the East in the fifteenth century, opium became a profitable export. At this time India started to raise the poppy commercially and to export opium to China.

By 1600, opium had become so important a part of medical treatment that a Dutch physician declared that without it he could not practice medicine. He became known as "Doctor Opiatus." Sertuner, a chemist, derived morphine from opium, and named it after the Roman god of sleep, Morpheus.

In the eighteenth century, the Chinese Emperor, Yung Chen, became so concerned about opium abuse that he prohibited the smoking of it. However, addiction had become so prevalent by this time that his demands were for the most part ignored. This was probably the earliest attempt at legal control of the abuse of drugs.

By 1820, opium smoking became such a serious problem that the Chinese Government prohibited English ships carrying opium from entering the Canton River. Much smuggling ensued, bringing into conflict the interests of China and England in this area. In 1840 the "Opium War" between these nations erupted. The treaty of peace which ended the war allowed trade in opium, at first in only a few, but eventually in all, Chinese ports. Laws limiting the use of opium were not effective.

In the Western Hemisphere, the Spanish explorers and conquerors of Latin America learned that the natives chewed a leaf which produced a stimulant effect. This was the coca leaf, from which the drug cocaine is derived.

Opium began to arrive in America in small amounts before the creation of the Republic. In the early 1800's opium smoking was introduced to the Pacific Coast by Chinese immigrants. The practice gradually spread Eastward.

The injection of narcotics through the skin by needle as a quick way to relieve pain was first widely used during the Civil War. Many soldiers became addicted during the course of treatment of wounds or illnesses, since this danger was not fully recognized. The use of the needle became a common experience. At about the same time drug and general stores began dispensing medicines containing opiates without prescription. There was little or no control over the ingredients used and advertising promoted the use of patent medicines containing narcotics.

The Federal Pure Food and Drug Act of 1906 was designed to ensure the safety of medicines being offered for sale.

In 1914, when more than 200,000 persons in this country were addicted to narcotic drugs, Congress passed the Harrison Narcotic Act. Amendments to this Act regulated the importation, manufacture, production, compounding, sale, and dispensing or giving away of opium or coca leaves, their salts, derivatives or preparations.

A chronological list of some of the steps taken to control narcotics use in the United States follows:

1906 – Federal Pure Food and Drug Act. This Act regulated the use of patent medicines containing opiates.

1914 – Harrison Narcotic Act. This regulated the manufacture and distribution of morphine, cocaine and other narcotics.

1922 – Narcotic Drugs Import and Export Act. This provided heavy penalties for illegal import and export of narcotics.

1930 – Establishment of the Bureau of Narcotics within the Treasury Department. The Bureau's major function was to administer laws related to the traffic in narcotic drugs.

1937 – Marijuana was placed under control of federal legislation.

1944 – Demerol, a synthetic substitute for morphine, was placed under the control of federal legislation.

1946 – Harrison Narcotic Act Amendment. The original act of 1914 was amended to include synthetic substances having addiction-forming or

addiction-sustaining qualities similar to cocaine or morphine.

1960 – Narcotic Manufacturing Act.

1962 – White House Conference. More than 400 experts from various fields of medicine, science, law enforcement, research pharmacology, social work, education, and others, met in Washington, D.C., to discuss and pool information concerning the problems of narcotic and drug abuse.

1965 – The Drug Abuse Control Amendments. These amendments provided for stronger regulation of the manufacture, distribution, delivery, and possession of stimulant, depressant, and other psychotoxic drugs. The Food and Drug Administration was given stronger enforcement powers to prevent drug counterfeiting. These amendments became effective February 1, 1966.

1966 – The Bureau of Drug Abuse Control. This separate bureau was organized to carry out the responsibilities of the Food and Drug Administration under the Drug Abuse Control Amendments of 1965. The major functions of the bureau are case assistance, investigations, and drug studies and statistics.

1966 – Public Law 89-793 – Narcotic Addict Rehabilitation Act of 1966. The Act generally provides for civil commitment in lieu of prosecution, as well as after criminal conviction, of addicts charged or convicted with nonviolent crimes for a maximum treatment period of 42 months with the Surgeon General being given discretion to split the time between hospitalization and aftercare.

CHAPTER II

THE EXTENT

It is difficult to estimate the size of the drug abuse problem in the United States. More than 46,000 narcotic addicts are now registered with law enforcement agencies. The total number of narcotic addicts is probably about 60,000. This represents one addict for every 4,000 persons in the country and, bad as it is, it reflects an improvement over the situation in the past. In 1920 there were 200,000 addicts – one for each 400 in the population at that time.[1]

The decrease in the number of addicts corresponded to the initiation of active measures for the close control of the narcotic drug traffic. The Harrison Act was passed in 1914, but was not effectively implemented until after the end of the First World War in 1918.

The distribution of narcotic addicts over the 50 states is very uneven. Nearly half are found in New York City alone. And most of the rest are in other large cities:

New York City, 47 per cent of total; Chicago, 14 per cent of total; Los Angeles, 5 per cent of total; Detroit, 3.5 per cent of total; Washington, D.C., 2 per cent of total.

The other 28 per cent are distributed over the rest of the country and even these are mainly in the larger cities. After the five listed above, the largest problems exist in Newark, Philadelphia, San Diego, San Francisco and San Antonio, in that order.

The extent of the abuse of non-narcotic drugs is much more difficult to know, since these drugs have been under much less rigid control. Dr. James L. Goddard, U.S. Commissioner of the Food and Drug Administration, has recently estimated that more than half of the nation's annual output of over ten billion doses of barbiturates and amphetamines are being used illegally.[2]

The actual extent of the problem in New Jersey is uncertain. The available figures are misleading because they represent only those persons apprehended for violation of the laws relating to narcotics alone. Police records are the primary

[1] *Prevention and Control of Narcotic Addiction,* U. S. Treasury Department, Bureau of Narcotics, Washington, D.C., 1964.

[2] Press Release of U.S. Department of Health, Education and Welfare Food and Drug Administration, dated March 7, 1966.

source of statistics regarding the number of addicts in our communities at this time. It seems apparent that more addicts are unknown to the police than are known to them. Within these limitations the following report is made:

The heaviest concentration of addict arrests is in the northeastern counties of Essex, Passaic, Union and Hudson, with heroin the major narcotic used. Seventeen of New Jersey's twenty-one counties have been represented in the admissions to the residential treatment center at New Jersey Neuro-Psychiatric Institute. The number of registered addicts in New Jersey has been increasing at a rate of approximately 10% per year with increasing use by younger age groups.[3]

In New Jersey, 2,084 persons were arrested in 1966 on charges of violating the narcotics control laws. Of these, 1,948 were adults, 131 were under 18 years of age. The distribution of the arrests by counties reflects the higher incidence in the larger cities.[4] (Table 1).

There has been a gradual increase in the number of registered narcotic offenders since 1952. (Table 2 and Figure 1). A total of 7,896 persons were arrested in 1968 for narcotics offenses in New Jersey, an increase of 56.5 per cent over 1967. Fifty-three per cent were under 21 years, 38 per cent 18-20, and 15 per cent 16 and under.

In July, 1962 the New Jersey Legislature enacted a statute to control the use of barbiturates, amphetamines, tranquilizers, certain sedatives and other prescription drugs. These are called "dangerous drugs." Fifty-one adults were arrested for violations of this statute and were tried in municipal courts in 1962, 160 in 1963, 244 in 1964, 374 in 1965 and 292 in 1966. In addition, 392 youngsters under 18 were arrested and tried in Juvenile and Family Relations Courts in 1966.[5] About three-quarters of the juvenile arrests involved glue-sniffing – 354 were boys and 38 were girls.

Table 1 "Total Cases and Arrests in the State of New Jersey for the Year 1966." Page 120 of the Final Report – 1967.
Table 2 "Total Registered Narcotic Offenders in the State in the Various Counties for Years 1952-1966." Page 121 of the Final Report – 1967.
Figure 1 "Trends in Narcotic Arrests by Type of Offenders, 1952-1964 Incl.," Page 25 Final Report – 1967.

[3]Drug Study Committee, "Addiction-Drugs and Treatment = Maturity." N. J. Welfare Council, Montclair, October, 1966.
[4]*Final Report* of the Narcotic Drug Study Commission of the New Jersey Legislature, 1966, Trenton, 1969.
[5]*Final Report* of the Narcotic Drug Study Commission of the New Jersey Legislature, 1966, Trenton, 1969.

In New Jersey five separate laws have been enacted through the urging of the New Jersey Narcotic Drug Study Commission.[6]

1. Senate 210 (approved December 17, 1964 as Chapter 226 Public Law 1964) involved the State of New Jersey with the operational problems related to the development of sound programs for prevention and rehabilitation of narcotic addicts and drug abusers.
2. Assembly Bill 547, enacted into law in December, 1966, as Chapter 313, Public Law 1966, updated the New Jersey Uniform Narcotic Drug Law and brought it into conformity with Federal narcotic laws. It permits proper coordination of enforcement activities between Federal and State authorities.
3. Assembly Bill 548, enacted into law in December, 1966, as Chapter 314, Public Law 1966, updated the 1962 law with respect to depressant and stimulant drugs. Control of hallucinogenic drugs was added, as it had been to the Federal law. The law now establishes proper controls for depressants, stimulants and hallucinogenic drugs and permits proper coordination with Federal and State authorities.
4. Assembly Bill 751, enacted into law in February, 1968 as Chapter 311, Public Law 1967, enables New Jersey to keep pace with the Federal law in establishing controls over drug counterfeiting.
5. Assembly Bill 176, enacted into law in February, 1968 as Chapter 298, Public Law 1967, expanded narcotic convictions reporting to State Police for statistical purposes. This statistical compilation program was expanded to include violations of dangerous drug laws as well as narcotic laws. This was done to give an accurate statistical portrayal of the problem of both narcotic and non-narcotic drug abuse in the State of New Jersey.

[6] *Final Report – 1967* of the Narcotic Drug Study Commission of the New Jersey Legislature, Trenton, 1969, pps. 1-5.

Narcotic Drug Study

TOTAL CASES AND ARRESTS IN THE STATE OF NEW JERSEY FOR THE YEAR 1966

Counties	*Arrests*	*Defendants*	*Male*	*Female*	*Age*
1. Atlantic	50	37	27	10	30
2. Bergen	73	56	55	1	23
3. Burlington	14	14	10	4	24
4. Camden	23	20	12	8	26
5. Cape May	1	1	1	0	19
6. Cumberland ...	2	2	2	0	27
7. Essex	886	709	629	80	27
8. Gloucester	1	1	1	0	27
9. Hudson	208	162	155	7	25
10. Hunterdon	0	0	0	0	0
11. Mercer	36	29	28	1	28
12. Middlesex	72	57	52	5	28
13. Monmouth	53	32	29	3	23
14. Morris	77	52	49	3	25
15. Ocean	23	16	16	0	21
16. Passaic	211	170	159	11	25
17. Salem	0	0	0	0	0
18. Somerset	4	4	3	1	21
19. Sussex	0	0	0	0	0
20. Union	214	172	155	17	25
21. Warren	0	0	0	0	0
	1948	1557	1481	156	27
Juvenile Courts					
22. Bergen	19	19	16	3	16
23. Essex	39	35	33	2	17
24. Hudson	15	15	15	0	17
25. Mercer	4	4	3	1	17
26. Middlesex	6	6	5	1	16
27. Monmouth	1	1	0	1	16
28. Morris	8	8	7	1	17
29. Ocean	4	4	3	1	17
30. Passaic	10	10	9	1	17
31. Sussex	6	6	6	0	17
32. Union	19	19	18	1	16
	131	127	115	12	17
Federal Bureau of Narcotics Dists. 2 and 3 .	5	5	5	0	22
Totals	2084	1689	1521	168	27

NOTE: The above totals compiled are from January 1, 1966 to December 31, 1966.

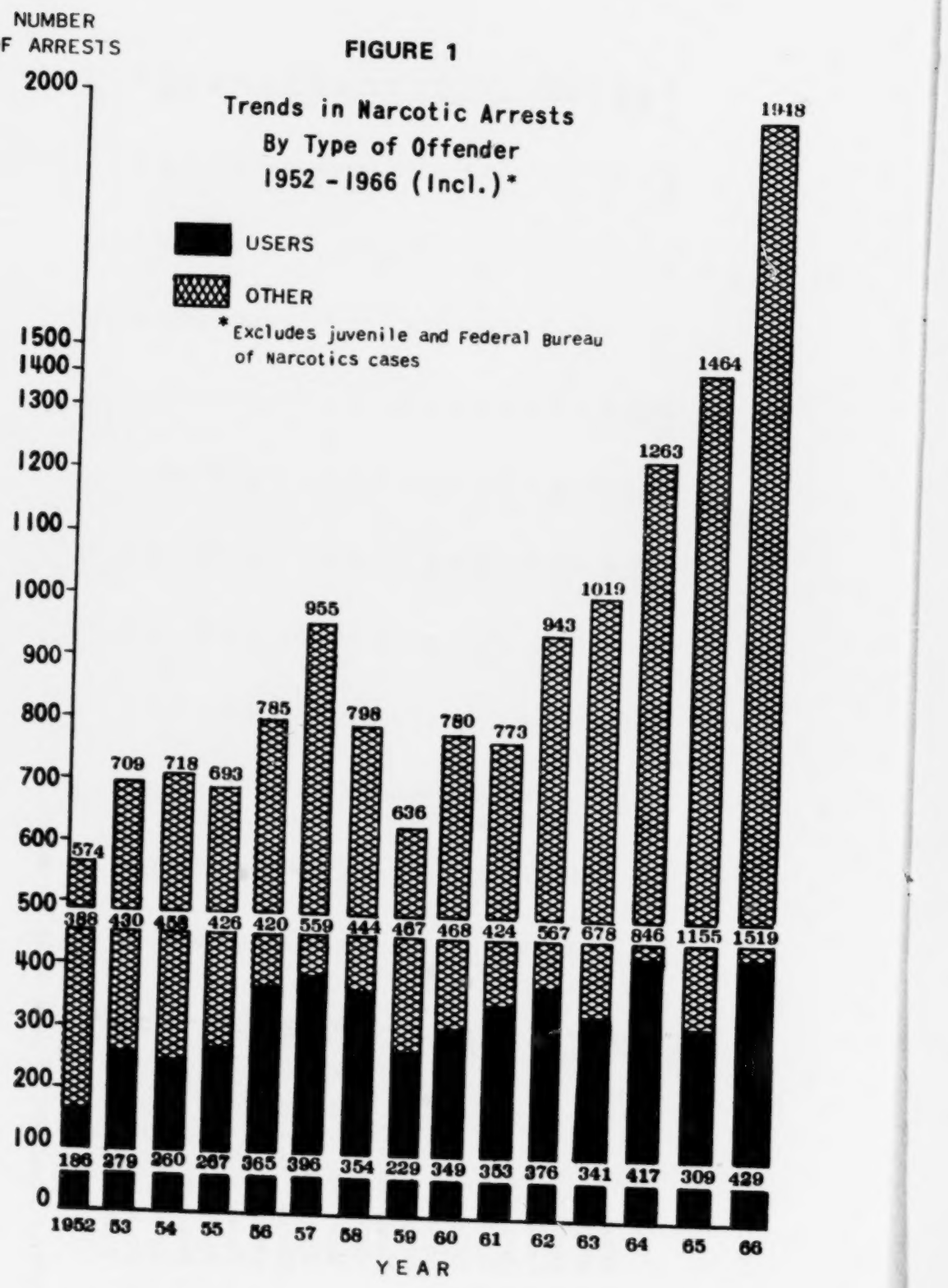
Total Registered Narcotic Offenders in the State in the Various Counties as Listed Below For Years 1952-1966

(Effective date of the Law, July 1952)

Counties	thru 1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	*Totals*
1. Atlantic	147	36	37	31	24	22	11	14	14	18	7	7	368
2. Bergen	0	1	4	1	4	4	4	18	11	19	31	45	142
3. Burlington	0	0	2	1	0	0	0	0	0	1	0	0	4
4. Camden	9	3	11	1	1	2	2	10	8	8	13	8	76
5. Cape May	1	0	1	0	0	0	0	0	0	1	2	0	5
6. Cumberland	0	0	0	0	0	0	0	0	0	1	0	0	1
7. Essex	716	94	137	115	117	167	150	160	173	191	195	229	2,444
8. Gloucester	0	0	0	0	0	0	0	0	0	1	2	1	4
9. Hudson	42	18	12	14	13	38	49	70	44	58	55	88	501
10. Hunterdon	0	0	0	0	0	0	0	0	0	0	0	0	0
11. Mercer	32	9	10	9	8	18	7	9	10	11	13	14	150
12. Middlesex	5	1	10	0	5	3	5	12	4	12	26	36	119
13. Monmouth	36	4	16	2	4	6	4	8	5	14	27	8	134
14. Morris	10	1	1	0	0	0	0	1	0	5	12	28	58
15. Ocean	5	0	3	0	0	2	3	3	0	0	2	2	20
16. Passaic	33	9	4	5	26	33	23	33	26	40	37	25	294
17. Salem	0	0	0	0	0	0	0	0	0	0	0	0	0
18. Somerset	1	0	2	0	1	1	0	3	0	3	1	1	13
19. Sussex	0	0	1	0	0	1	1	1	0	0	0	1	5
20. Union	24	3	10	16	8	16	30	39	41	44	42	47	319
21. Warren	0	0	0	0	0	0	0	0	3	0	0	0	3
Totals	1,061	179	261	195	211	313	289	383	339	427	465	540	4,660

NOTE: About 80% of the total 4,660 registered are listed as Users of Narcotics.

FIGURE 1


Trends in Narcotic Arrests
By Type of Offender
1952 - 1966 (Incl.)*
USERS
OTHER
*Excludes juvenile and Federal Bureau of Narcotics cases
NUMBER OF ARRESTS
2000
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
574
709
718
693
785
955
798
636
780
773
943
1019
1263
1464
1948
388
430
458
426
420
559
444
467
468
424
567
678
846
1155
1519
186
279
260
267
365
396
354
229
349
353
376
341
417
309
429
1952
53
54
55
56
57
58
59
60
61
62
63
64
65
66
YEAR

CHAPTER III

DRUG ABUSE AND DRUG DEPENDENCE
(Habituation and Dependence)

The repeated use of drugs causes some persons to feel compelled to continue to use them and to become dependent on them. This dependence may be psychic, a behavioral response with craving for drug continuance, or physical, an adaptive state requiring the presence of the drug to avoid the physiological disturbances of the withdrawal syndrome, or both. Marijuana and amphetamines cause psychic dependence only; barbiturates and heroin (the opiates and morphine-like substances generally) cause psychic and physical dependence. With the latter the user will suffer physically as well as mentally when deprived of the drug.

The physical effects of drug withdrawal (the abstinence syndrome) are well demonstrated when a heroin-dependent person (heroin addict) does not get this drug. Within four to twelve hours after the last dose, tearing of the eyes, sneezing, sweating, tremors and loss of appetite occur. These symptoms are followed by restlessness, depression, irritability, muscular weakness, enlargement of the pupils of the eyes, fever and an increased rate of breathing. The irritability increases, the victim is unable to sleep, violent yawning occurs; severe sneezing, excessive tearing of the eyes and running of the nose and hoarseness follow. Weakness and depression are pronounced. Marked chilliness alternates with flushes and excessive sweating. Vomiting, diarrhea and abdominal cramps develop. The chilly sensations of the victim are accompanied by "goose flesh," which makes the skin resemble that of a plucked turkey. This is the origin of the term, "cold turkey," used to describe the abrupt withdrawal of the drug from the user.[1]

Psychic dependence describes the situation in which the individual feels compelled to use a drug for psychic and emotional reasons without reference to physical dependence. Bromides, amphetamines (benzedrine), marijuana, and cocaine, for example, all may cause psychic dependence though their withdrawal does not produce physical symptoms. The dependency associated with their use is in some ways comparable to the cigarette habit though the direct physical and mental effects of the drugs mentioned are, of course, much more marked and harmful than those which result from the use of tobacco. The nature of "psychic and emotional" dependence is complex and inseparably interconnected with the structure and development of the personality of the individual.

[1] *The Pharmacological Basis of Therapeutics.* Louis S. Goodman and Alfred Gilman, Second Edition, MacMillan and Company, New York, 1956.

Another aspect of drug dependence, with a significant bearing on social and criminal consequences, is tolerance, the ability to withstand the actions of excessive quantities of a drug, and of the need for a larger and larger amount of a drug to produce its usual effect. While this process does not always develop with drug dependence, it is characteristic of certain drugs, especially the morphine-like opium derivatives, the barbiturates and sometimes the amphetamines. Extremely large doses of morphine or heroin may be required by addicts just to avoid the discomfort of drug lack. Tolerance does not develop with marijuana or cocaine.

Thomas DeQuincey, in his "Autobiography and Confessions of an Opium Eater," reported that he took 300 times the usual dose of opium in order to experience an effect. Since addicts may require 20 to 200 times the usual medical dose of a narcotic, the addiction is an expensive one to maintain, requiring perhaps expenditure of more than a hundred dollars a day simply to avoid discomfort. The entire energy of such an addict, as well as his thoughts and desires, are devoted to obtaining the drug and this is likely to require illegal activities, such as robbery and prostitution.

When medication is stopped most of tolerance disappears rapidly. Thereafter, the original small dose will again produce an effect and its repetition will reestablish tolerance more rapidly than in the first instance, so that the user must once again resort to larger doses. The knowledge that abstinence for a short time will reduce the size of the dose needed by the addict to one which is practical for him to obtain is often the motivation behind his request for treatment. It is clear that the drug user often submits to the "cure" not to relieve himself of the need for drugs but simply to make it economical for him to continue to use them.

CHAPTER IV

DRUGS COMMONLY ABUSED

Throughout history man has used a vast variety of substances to bring relief from physical and psychological distress. Any attempt to describe all of them would necessitate the publication of a voluminous document. This Chapter is therefore limited in scope to the consideration of only those which are commonly used in today's society.

Opium and Related Drugs

Opium is the inspissated juice of the capsule of the opium poppy, papaver somniferum, which forms after the plant has blossomed. Its medicinal properties are mentioned in the earliest medical document, 1500 B.C. It has been a mainstay of medicine through the centuries and owes these effects to its principal alkaloid, morphine. Opium also contains codeine and many other alkaloids. Some of these, particularly papaverine and noscapine (formerly narcotine) belong to a chemical group (which is quite different from the morphine group), do not relieve pain and are not dependence-producing.

Hoping to reduce abuse liability chemists have modified morphine in many ways, producing many new derivatives and compounds, some of which have been found useful in medical practice. The most important of the morphine derivatives are heroin, ethylmorphine, hydrocodone (formerly dihydrocodeinone), hydromorphone (formerly dihydromorphimone), oxycodone (dihydrohydroxycodeinone), oxymorphone (dihydrohydroxymorphenone), and methyldihydromorphinone (metopon).

In addition to these substances of indirect natural origin chemical ingenuity has developed a wide variety of other compounds with similar properties, the synthetic analgesics, of which the most important are pethidine (meperidine or isonepecaine) and metbadone (amidone). Many of the foregoing natural and synthetic drugs are on the market under a variety of trade names.

Morphine:

The most important beneficial effects of morphine are its ability to relieve pain, anxiety and discomfort generally and to promote sleep. Consequently it gives rise to a feeling of ease and comfort and in some persons a feeling of well-being or euphoria beyond symptomatic relief. Morphine also constricts the pupils, slows the heart, decreases the rate and depth of respiration, and causes sweating

and constipation. It may bring about nausea and vomiting (half the time if the patient is ambulatory) and infrequently an allergy-like skin rash.

Also characteristic of morphine is the development of tolerance, which is not, however, uniform for all of its actions. Tolerance occurs most rapidly to depressant effects, to its analgesic and sedative actions and to its effect on respiration; it is less marked for the effects on the pupil and the gastro-intestinal tract, which may persist through long-continued use. Physical dependence is an inevitable accompaniment of the repeated use of morphine, increasing in intensity with the duration of use and amount of drug taken and accompanied by a varying degree of psychic dependence or craving, related in part at least to the feeling of well-being induced in the particular patient.

All of the morphine derivatives mentioned, produce all of the morphine effects, differing from morphine quantitatively as they differ from it in pain-relieving potency with only minor variations. With all of them the possibilities of tolerance and drug dependence of morphine type must be kept in mind. The synthetic morphine-like analgesics have similar properties and only minor qualitative differences.

Heroin:

Heroin is morphine-like in practically all respects, approximately three times more potent dose-wise, rapid in onset and shorter acting. Unpleasant side effects may occur a little less frequently and intravenous injection, "main-lining," may give a quick thrill or intense feeling of well-being. Its potency and its ease of manufacture and transport have made it the drug of choice, in the illicit drug traffic. Medically it has no advantage over morphine and manufacture and trade in it are illegal in the United States and in many other countries.

Morphine dependence and heroin dependence are alike in their characteristics, though the persons involved may show some differences. The former may arise through legitimate medical need; the latter, in the United States at least, can only arise through association with other drug users and trial of an illegal drug. With both, the victims are seeking escape from reality and avoidance of discomfort, have the same drives for continued drug use, and are prone to antisocial behavior and criminal activity to that end. They are not prone to violence, except when they are deprived of their drug.

There has been a growing trend in recent years for drug abusers to use a multiplicity of drugs on a "spree" basis in part according to availability, complicating the drug dependence and its treatment. Because of underlying personality disorders and other factors heroin dependent and other drug dependent persons are prone to relapse to drug use whatever treatment they may undergo.

Codeine:

Codeine is methylmorphine. It occurs in opium in low concentration but for the market is manufactured principally by conversion of morphine. It is a weaker analgesic dose-wise, requiring a six to ten times larger dose according to the situation, but can be as effective if the dose is large enough. As a morphine derivative it is like morphine generally in its properties, but the doses commonly used produce very little sedation or feeling of well-being and never as much respiratory depression. It is an effective cough suppressant in small doses and has little or no pain relieving effect. At the higher dose levels it does produce pain relief (60-75% of total production). Codeine is one of the most commonly employed medicaments.

Tolerance and dependence of morphine type can follow the prolonged use of codeine and it can be used by a person dependent on one of the more potent drugs, such as morphine or heroin, in sufficient dose to prevent the occurrence of withdrawal symptoms but because of its lack of any particular euphoric effect codeine generally fails to satisfy the craving or psychic dependence. Its preparations for the relief of cough, containing not more than a grain of codeine to the ounce, are infrequently and sporadically abused, sometimes by teenagers, but very large quantities must be consumed without interruption over a considerable period of time for any dependence-producing effect. These conditions are not met by "spree" abuse, and are very unusual in any use of codeine containing cough preparations. Some of these preparations contain alcohol, which may play a role in their abuse. Also alleged abuse of codeine preparations has been confused in some instances at least with abuse of preparations of hydrocodone, a more powerful agent, the availability of which has now been restricted by Federal action. The overall abuse liability of codeine and its preparations is very low.

Nalorphine (Nalline):

In the course of the chemical manipulation of morphine, it was discovered that a particular modification produced an agent which specifically antagonizes or counteracts the usual effects of morphine and related drugs especially their depression of respiration. This is of very great and life-saving importance when an overdose of one of these has been taken. The antagonistic effect also manifests itself by the precipitation of signs and symptoms like those of drug withdrawal when nalorphine is given to a person in whom drug dependence of morphine type was developed. This property has been made use of in the Nalline Test in some localities to detect relapse to the use of narcotic drugs.

In persons who have not recently received a morphine-like drug nalorphine produces mild and irregular sedation, some constriction of the pupils, and only a little respiratory depression. For those recently subjected to a morphine like

substance, it produces anxiety and extremely disturbing and unpleasant sensations amounting to fear of impending death, the symptoms which are spoken of collectively as nalorphine-like dysphoria, making the drug disliked particularly by persons familiar with the actions of morphine, heroin, etc. The antagonistic action of nalorphine extends to all morphine-like agents including the synthetic analgesics.

Synthetic Analgesics

A little more than 25 years ago in an unrelated line of investigation it was discovered that a new chemical substance, known then as Dilantin, now as meperidine, pethidine, isonipecaine, and by many other names, had interesting pain-relieving properties which would permit its use in place of morphine. Subsequently thousands of related substances were made, some of which were much more powerful, some differed in other interesting ways and a few have found use in medicine. The discovery of meperidine also led to the production of a great many other synthetic analgesics of which one of the most important from the drug abuse standpoint is methadone.

Meperidine (Pethidine, Isonipecaine):

To the uninitiated meperidine appears to be unrelated chemically to morphine; actually the essentials of its structure can be found within the morphine molecule and perhaps the actions of both are related to these essentials. The injection of meperidine for pain relief requires a dose five to ten times greater than the usual dose of morphine, is accompanied by less quieting or benumbing effect, but produces some respiratory depression, some effect on the circulation and the usual side effects which accompany the use of other opiates. Very large doses are likely to cause excitement rather than unconsciousness and convulsions may occur.

Tolerance and dependence, both psychic and physical, develop with repeated use of meperidine as with morphine, and disregard of these facts has caused many professional people, physicians and nurses, to become dependent upon it. Heroin addicts will use meperidine, but it has played a relatively minor role in the illicit drug traffic. The drug dependence produced by meperidine is of the morphine type. It will substitute for morphine in a morphine dependent person and the abstinence syndrome following withdrawal of meperidine is like that following withdrawal of morphine.

Methadone:

Methadone is another synthetically produced pain-reliever which appears to be chemically unrelated to morphine, but on closer examination is revealed to possess the chemical features common to meperidine and morphine. Qualitatively it produces essentially all of the effects which are produced by morphine and it is equally effective as an analgesic. It is noteworthy that it is approximately as effective when taken by mouth as by injection and is relatively longer acting. Tolerance and dependence occur as with morphine and a similar abstinence syndrome follows withdrawal, but is slower in onset, less intense and more prolonged. It substitutes for morphine or another opiate very adequately in dependent persons and a high degree of cross-tolerance between it and other opiates occurs.

Barbiturates

The barbiturates form an important group of depressants of the central nervous system, widely used for the alleviation of states of emotional tension and insomnia. They are also used effectively as anti-convulsants and to induce anesthesia. A great many barbiturates have been developed and introduced under a confusing variety of names and claims of efficacy and safety. The oldest barbiturate, barbital, was introduced into medical practice in 1903, followed by phenobarbital in 1912. Both are effective and still widely used. More than 2500 others have been synthesized and more than 50 marketed. Some of them are amobarbital, butabarbital, mephobarbital, pentobarbital, secobarbital, and thiopental. All are similar in having the effect of decreasing the normal activities of the brain and spinal cord and can produce any degree of depression from slight sedation to deep coma. They differ from one another mainly in the speed of onset and duration of effect and in their usefulness for specific purposes.

The barbiturates differ from the morphine-like drugs in that they lack significant ability to relieve pain without impairment of consciousness. They produce respiratory depression especially in overdosage and this is not antagonized by nalorphine. They have little effect on the gastrointestinal tract.

Tolerance and dependence, both psychic and physical, develop during prolonged administration of barbiturates, though ingestion of amounts significantly above the therapeutic levels appears to be required for physical dependence to become apparent. Tolerance development is irregular and incomplete so that mental, emotional and neurological impairment may persist in some degree. Withdrawal may be manifested only by weakness and anxiety or by the appearance of a characteristic abstinence syndrome differing significantly from that of morphine so that we speak of drug dependence of barbiturate type.

The symptoms that occur during withdrawal are dramatic. For the first 12 to

16 hours without drug the mental and neurological condition may appear to improve. After this restlessness, anxiety, tremor and marked weakness begin, progressing to insomnia, sometimes nausea and vomiting and postural hypotension (tendency to faint because of low blood pressure on standing). Muscular twitching occurs and a single or repeated convulsions may appear from the second to the fifth or seventh day. Hallucinations, both visual and auditory, and delusions occur with or without the convulsant state. The withdrawal symptoms are difficult to control so that, if dependence is suspected, barbiturate administration should not be stopped abruptly. Withdrawal is more dangerous than with the opiates.

Marijuana

Marijuana is a variety of cannabis and the active principles are the same. It is the flowering tops of the hemp plant and is known in other parts of the world as hashish, bhang, ganja, dagga and by many other names. On the United States underworld market, the flowering tops are dried and broken up for incorporation into cigarettes (reefers). The flowering tops contain an extractable resin which can be taken by other means than smoking and from which can be obtained tetrahydrocannabinols and related substances. The precise role of the constituents in the production of the effects of cannabis is still a subject of investigation.

All use of marijuana, whether as an occasional cigarette or many a day, is a drug abuse because the drug is illegal and has no legitimate medical application. Its effects generally may be pleasurable to the user and result in psychic dependence, but there is essentially no tolerance to the effects developed, no physical dependence and hence, no abstinence syndrome when use of the drug is stopped.

The immediate effect varies greatly from person to person; is in large measure unpredictable and has features of motor excitation and depression of the nervous system. There may be exhilaration, jocularity, a dreamy state and distortion of perception of time and space. The thoughts of the smoker may become disconnected, uncontrolled and sometimes bewilderingly profuse with a sense of well-being, or he may experience depression, moodiness or even fear of death. Users describe these states as "highs" or "downs."

Logical thought is disrupted; perception is crowded and disturbed. Minutes seem hours and seconds seem minutes. Space may be broadened so that near objects appear to be far away. These alterations in sense of time and distance lead to disastrous errors of judgment on highways. The head often feels swollen and the extremities heavy. There may be hallucinations, sometimes colorful and pleasant or of a sexual nature. Tremor, unsteadiness, ringing in the ears, overactive reflexes, increased sensitivity to external stimuli are signs of overdosage.

An exaggerated sense of one's accomplishment or ability without improved performance is common. If the user is alone he is likely to be quiet and drowsy. More commonly the drug is taken in company and the user is inclined to be animated, talkative and hilarious, but rarely aggressive or violent.

There is no sound evidence of mental deterioration from chronic use of marihuana or of a switch to morphine, heroin, cocaine or alcohol as a direct consequence. Users, however, associate with other users and are prone thereby to try other drugs and in any case must resort to antisocial behavior to obtain their drug. The effects of the drug and the associations also break down inhibitions, in persons who already have personality weaknesses, are usually idle and lack initiative, and have a history of frustrations and maladjustments. The use of marihuana is too often a first step in a drug abuse pattern which may culminate in drug dependence of any of the other types. Drug dependence of marihuana type comprises psychic dependence only, is usually not very strong, and never invokes tolerance or physical dependence, but its consequences are nonetheless dangerous.

Amphetamines

Amphetamine is a stimulant of the central nervous system, especially of the cerebral cortex. It is used in medicine to treat certain states of mental depression, to counteract the effect of sedative drugs, to overcome temporarily the feeling of fatigue and has been used widely to reduce appetite when weight reduction is desired. It should be used sparingly in fatigue and not at all for weight reduction because of its poor effectiveness, and the need for long continued employment with a proneness for abuse in the latter. Benzedrine and dexedrine are commonly used names for amphetamine and methamphetamine is a closely related substance.

When the usual dose of amphetamine is taken by mouth the following effects may occur: alertness, wakefulness, increased initiative, an elevation of mood, increased confidence and elation, decreased sense of fatigue, increased motor and speech activity and an increased ability to concentrate. The drug may fortify an individual for prolonged mental effort, but does not increase performance appreciably, except perhaps in trained individuals. It increases initiative rather than the ability to do mental work.

Larger doses may cause headache, palpitation, dizziness, vasomotor disturbances, agitation, confusion and apprehension. Very large doses, especially intravenously produce effects bordering on those of cocaine, agitation, motor excitement, delirium and hallucinations. Overdoses may cause disturbances of the circulation, irregularities of the heart and circulatory collapse.

Abuse of amphetamine and related substances has become increasingly com-

mon, among adolescents and others, both by themselves and alternatively with other drugs, the barbiturates, alcohol and other sedatives. Indeed multiple drug abuse has become the trend more and more in recent years.[1] A high degree of tolerance to the amphetamines can develop and psychic dependence because of the feeling of elation and apparent relief of fatigue and depression. Physical dependence does not develop, though abrupt withdrawal of the drug results in a feeling of depression and let-down because of cessation of the previous stimulation. There is no true abstinence syndrome.

Cocaine

Cocaine is obtained from the leaves of the coca bush indigenous to certain South American countries. The leaves have been chewed for centuries by the natives in the high Andes to decrease their discomfort of hunger and fatigue, but this can be stopped abruptly, apparently without difficulty if food is adequate and environmental conditions are improved. The alkaloid is a local anesthetic but its use for this purpose has largely been replaced by effective synthetic substitutes.

Abuse of cocaine, especially by snuffing, was very prevalent and to combat it the drug was included among the narcotics in international conventions and national narcotics laws and regulations. Its abuse has diminished but persists now mainly by intravenous injection and frequently in combination or alternating with heroin or another opiate. The effects of coca leaf chewing also dealt with in the international conventions depend upon the cocaine absorbed.

When cocaine is taken into the body its effects are manifested by garrulity, restlessness, excitement and lessened sense of fatigue. Large doses cause tremors and convulsive movements. Drug dependence of cocaine type involves the highest degree of psychic dependence, but no tolerance and no physical dependence. The drug can be stopped abruptly without physical signs but with the strongest craving for its resumption. Its use by injection is attended by euphoric excitation, feelings of muscular and mental strength and hallucinations, auditory, visual and tactile. Often attendant are paronoic feelings of persecution and incitement to violence against the presumed persecutor. Cocaine abusers are prone to inject the drug repeatedly to the production of great excitation, and then to inject heroin to partially offset this effect so that more cocaine can be taken and more excitation produced.

[1] "Drugs a Growing Campus Problem," by John Corry, *The New York Times*, March 21, 1966.

Tranquilizers

In recent years many new medications have been developed whose chief purpose is to allay tension and anxiety, hence the term, tranquilizer. Some examples are:

Rawolfia alkaloids – reserpine
Phenothiazines – chlorpromazine; promazine
Propanediol carbamate – meprobamate
Diphenyl methanes
Diazepoxides

These drugs relieve anxiety and tension states generally and may decrease reflexes and promote muscular relaxation. Some of them have useful hypotensive and antiemetic effects. Since they are sedative and calming they promote a feeling of well-being and psychic dependence may follow prolonged administration. As with the barbiturates, tolerance can develop and the repeated use of excessive amounts have caused physical dependence with an abstinence syndrome like that of drug dependence of barbiturate type.

The use of these agents has revolutionized the care of mentally disturbed patients, but precautions must be taken against prolonged excessive use. Particularly noteworthy is the enhancement of sedation and psychomotor disturbances if the use of the tranquilizers (and of the barbiturates) is superimposed upon the use of alcohol. This enhancement extends to depression of respiration, with a possible fatal outcome.

Bromides

For more than a hundred years the sedative effect of the bromides has been known. Proper doses produce mental calmness, sedation, drowsiness and sleep. Larger doses cause lassitude, disturbed intellectual processes, impairment of thought and speech, dullness of perception and faulty memory. Very large doses cause severe depression of the central nervous system, until coma and death may occur. Long continued use of bromides may cause skin rashes (acne-like), headache, loss of appetite and bizarre mental and neurological disturbances.

Bromide poisoning is not uncommon. The misuse and abuse of this drug is facilitated by its availability without prescription in many drugstore remedies which do not reveal their bromide content in their names.

Glue Sniffing

In New Jersey about half of the reported juvenile drug abuse violations involve the sniffing of glue. Such violations are increasing rapidly.

The glues are cements used in the construction of model airplanes. They contain volatile hydrocarbon solvents which are allowed to evaporate in closed containers and are then inhaled to produce the symptoms of intoxication which the user desires. The hydrocarbon content varies from one brand of glue to another and the effects vary with the hydrocarbons present, the amount inhaled and the condition of the user.

Other sources of hydrocarbon vapors are also used on occasion. They include gasoline, paint, paint thinner, lacquer, varnish, kerosene and lighter fluid.

Inhalation of high concentrations of hydrocarbon vapors may lead to rapid depression of the vital centers of the brain and may cause death from respiratory failure. High concentrations have also been known to precipitate irregular heart rhythms and death from that cause.

The inhalation of lower concentrations produce symptoms not too different from those caused by the drinking of alcohol. In-coordination, restlessness, excitement, confusion, disorientation, unsteadiness, delirium and coma occur. Often these symptoms are preceded by warning signs such as headache, blurred vision, dizziness, a ringing in the ears, loss of appetite, nausea and weakness. An incidental and not insignificant hazard is death by asphyxiation because the person loses awareness or becomes unconscious while inhaling the glue or other fumes in a confined space such as a plastic bag.

The breathing of hydrocarbon vapor over a period of time may cause muscular weakness, listlessness, fatigue and weight loss. Sometimes damage to the nervous system occurs, causing confusion, unsteadiness, tremors, abnormal sensations and paralysis.

Hallucinogens

For centuries men have sought and used substances which could alter perception or the state of consciousness. Many plants produce such effects. They include a cactus, several fungi and a common flower.

The use of hallucination-producing substances has interested many persons. In primitive societies they were (and are) used as part of religious ceremonies; physicians have experimented with their use in the treatment and study of certain kinds of mental illnesses; others have used them to produce a unique kind of experience.[2]

[2]"Patterns of Hallucinogenic Drug Abuse" by Arnold M. Ludwig, M.D. and Jerome Levine, M.D., *J.A.M.A.*, 191:92 (January 11, 1965).

LSD:

LSD is the most widely used of these substances today. Its chemical name is lysergic acid diethylamide. It is also known as LSD-25, lysergide and Delysid.

LSD is the most potent of the hallucinogens, effective doses being about one or two ten-thousandths of a gram. An ounce of the chemical thus will provide about 300,000 doses. The drug is usually obtained in liquid form and is then deposited on sugar cubes. LSD's mental effects were discovered by a Swiss chemist, Albert Hofmann, in 1943 when he accidentally ingested a minute amount of the substance. Dr. Hofmann described the effects he experienced, including dizziness, visual distortions and other changes in sensation. The faces of the persons around him appeared to him to have been transformed into grotesque, colored masks. He felt that he was suffocating. A strange alteration in his self-perception occurred; at times he seemed to stand outside himself as a disinterested observer of the activities, able to hear himself muttering jargon or screaming half madly.

It is usually taken orally, although it is also effective when injected.

LSD usually produces dramatic effects. A bizarre world of exploding colors and nightmarish reality envelopes the user. All sensation seems enhanced. The effects have been described both as "the greatest experience of my life" and as "a living hell I'll never forget." There may be uncontrollable or nearly uncontrollable violent urges. One of New York City's hospitals recently reported that at least two patients are treated each week for severe terror reactions accompanied by homicidal or other violent urges and overwhelming fear – resulting from the use of LSD.

Usually the effects last about eight hours, but recurrences of the hallucinatory state may occur much later as long as six months after a single dose was taken.

Peyote:

Peyote is a hallucinogenic substance obtained from a cactus plant found in the arid parts of Mexico. The crude cactus contains more than ten alkaloids, including mescaline, considered below. In Mexico and Texas peyote can be purchased very inexpensively. It is usually taken by mouth, but is very gritty and bitter. It is used by native religious sects who undergo hallucinatory experiences in groups as part of their ceremonies.

Mescaline:

Mescaline is a pure alkaloid compound first isolated from peyote in 1898. It is usually taken by mouth in capsules.

Morning Glory Seeds:

Morning glory seeds have been used in recent years to produce hallucinations. The active ingredient they contain has not yet been demonstrated with certainty. It is known that LSD and related compounds are present in the seeds of the tropical morning glory, the ololiuqui plant, found in Central America and Mexico. These plants and their seeds are used to produce "religious ecstasies" by certain cultural groups. Therefore, it is possible that the same components occur in the seeds of some of the non-tropical morning glories. On the other hand, some of the symptoms produced by morning glory seed ingestion may represent toxic effects of chemicals with which the seeds have been coated to protect them.[3]

The ingestion of morning glory seeds seems to produce effects quite similar to those seen with LSD. There is increased awareness of colors, feelings of tension and anxiety, fear of insanity and uncontrollable weeping.

Psilocybin:

Psilocybin, derived from a fungus found in Mexico, was first isolated by Albert Hofmann in 1958. Little is known of the extend of its use or of its effects. Experimentation with psilocybin played a significant role in the initiation of the spreading abuse of LSD and related substances.

DMT (Dimethyltriptamine):

A short-acting hallucinogen, DMT is found in the seeds of certain plants native to the West Indies and parts of South America. The pow[illegible]red seeds have been used for centuries as a snuff-called "cohoba" – in religious ceremonies to produce a state of mind which the Haitian natives claimed enabled them to communicate with their gods. It is also produced synthetically by clandestine chemists. DMT is not taken orally, but its vapor is inhaled from the smoke given off by burning the ground seeds or powder mixed with tobacco, parsley leaves, or even marihuana. It can also be injected. The effects of a single dose – 60 to 150 milligrams – last only from 45 to 60 minutes and will produce mainly hallucinations. It may cause psychological dependence, but not physical dependence.

[3]"Morning Glory Seed Reaction" by Albert L. Ingram, Jr., M.D., *J.A.M.A.*, 190:1133 (December 28, 1964).

DOM (STP – methyl dimethoxyamphitamine):

DOM, known popularly as "STP," appeared on the psychedelic scene in the early spring of 1967. Articles in the underground newspaper promoted its use, claiming STP to be stronger than LSD. Doses of 1 to 3 mg. produce euphoria and doses of more than 3 mg. can cause pronounced hallucinogenic effects lasting 8 to 10 hours. STP is almost 200 times more powerful than mescaline but one-tenth as potent as LSD. STP is not found in nature but is synthesized in the laboratory and has appeared in illegal channels in tablet form.

Use of Hallucinogens

There are three main patterns of use of these drugs. First, some narcotic drug addicts use hallucinogens only irregularly and usually in conjunction with heroin or some other narcotic drug, in order to enhance its effect. The addict is an unlikely candidate for hallucinogens abuse.

Second, there is a group of "arty," "creative," "beatnik" people, such as struggling young artists, musicians, actors and writers, who use hallucinogens as well as marijuana, amphetamines and barbiturates. They seem to enjoy the euphoric effects of marijuana, but also seek the feelings of greater insight, inspiration and sensory stimulation and distortions which the hallucinogens produce. These people generally do not take the drugs solitarily, but form groups and often have parties for their use mainly on weekends.

Third, a small number of persons take the hallucinogens repeatedly over a long period of time, to the exclusion of all other drugs. Some use LSD or peyote two or three times a week or even more often for periods of months or years. Their goal seems to be very personal; they speak of achieving greater self-understanding. One patient reported that under the influence of LSD he reached a "Christ-Like" state of mind and a great feeling of altruism. Mexicans and Indians who use peyote as a religious act say that through the drug they "find God."

Large doses do not appear to have directly caused deaths, but they have procuced frightening and dangerous symptoms. There are many reports that large doses of LSD have made users believe that they were going insane. Homicidal drives are commonly reported. Perhaps most dangerous is the experience that the patient feels himself invulnerable. Some have tried to stab themselves, to jump out of windows and to jump off bridges in the belief that nothing could harm them. Psychic dependence on LSD can undoubtedly occur, although some patients fear its effects and may refuse its repetition. Tolerance to it can be attained very rapidly and as rapidly lost. There is no evidence of the production of physical dependence. Drug dependence of LSD type is very highly characteristic.[4]

[4]"LSD: A Fascinating Drug and a Growing Problem," by Bernard Weinraub, *The New York Times*, April 22, 1966.

CHAPTER V

THE ROOTS OF DRUG ABUSE

The forces which cause children to use drugs are the same potent needs which motivate all behavior:

The need to be accepted.
The need to belong.
The need to be loved.
The need to love.
The need to express oneself.
The need to be important.
The need to gain recognition.

If the normal pathways for satisfying these needs seem to be blocked, the child may be driven or tempted to try another, drug use, for satisfaction.

The image of the teen-age drug abuser as a juvenile delinquent is only partly true. Many are likeable, conservative, well-mannered, easily-influenced youngsters. They come from all segments of society; the city slums are disproportionately represented, but middle and upper-class neighborhoods contribute a share as well.

According to the Narcotic Drug Study Commission of the New Jersey Legislature, the great majority of narcotic users begin to use illicit drugs before the age of twenty, often in the early teens.[1] Why do these youngsters start? What do they hope to achieve through the use of drugs?

The chronic abuse of drugs is evidence of emotional maladjustment. The personality defects responsible have a variety of causes, but they include a common need to escape from the problems of every day living, or to conform to establish group behavior patterns. Whether this is because the problems the individual faces are truly overwhelming or because the ability of the personality to withstand stress is below normal, there is an overpowering need to escape, no matter what the cost.

The explanation of the addict illustrates this. A young woman living in one of New Jersey's larger cities started to smoke marijuana at 15.[2] Her father was

[1] *Interim Report of the Narcotic Drug Study Commission of the New Jersey Legislature for 1963,* page 110.
[2] *Ibid,* pages 67-71.

widowed; she made her home with an aunt. Shortly after starting to use marijuana she left high school. By the time she was 19 she was dependent on drugs and was using heroin, cocaine and barbiturates. After starting to use heroin she was imprisoned several times and thus forcibly taken off drugs – once for a six month period. She was asked how long after being released from prison was it before she decided to resume the use of heroin.

"Right away," she said. She took the drug the day she was discharged from prison.

An interviewer asked if she would do the same again, and she replied, "I don't think I'd stay off no longer than I could get the stuff."

"You don't want to quit?"

"I want to in a way," she said. "I like drugs and I just don't like what drugs do to me, you know. That's why I want to quit. But if I had a big amount of drugs, say, that would last me as long as I wanted them to last and I wouldn't have to prostitute or break into somebody's house to get some money, I think I'd go on using them."

She saw drugs as an escape from her problems, and as a way of life, even though she could see the price she was paying for using them.

A 17 year old boy, who was addicted to heroin and who also used cocaine, put it this way in explaining his reasons for using drugs.

"It takes you away for a while."[3]

One can see the similarity of this approach to life and that of the alcoholic. Drug abusers share with alcoholics an emotional disturbance the nature of which is still somewhat obscure. Persons who habitually use barbiturates and tranquilizers closely resemble alcoholics psychologically and they may be actual or potential alcoholics.

The personality patterns of such individuals differ somewhat from those of opiate users. While the heroin addict takes drugs to suppress normal as well as aggressive desires, barbiturate, tranquilizer and alcohol users seem to get gratification and release by expressing their aggressive, hostile feelings in violent behavior. That is, they tend to seek solutions to their conflicts by "acting out."[4]

[3]*Ibid,* page 75.

[4]*Interim Report of the Narcotic Drug Study Commission of the New Jersey Legislature for 1965,* pages 59-60.

The actions of the barbiturates are ideally suited for bringing about a mental and emotional state which facilitates this objective. Like alcohol, the barbiturates suppress the individual's inhibitions and allow him to respond more directly to inner drives in his actions.

The greatest concentrations of narcotic users are found in the lowest economic and social sections of the city, where disruptions of family life are more general. Here, also, are likely to be brought together the groups which are discriminated against by the larger community. In this situation more children will grow up feeling rootless, unhappy and mistrustful of authority. They have neither society nor family to help them satisfy their needs for affection and self-expression.

Isbell[5] in a study of hundreds of addicts at the U.S. Public Health Service *Hospital in Lexington, Kentucky* characterized them as nervous, tense individuals with much anxiety. They also complained often of physical symptoms. They were usually irresponsible, selfish, immature, thrill-seeking persons, constantly in trouble. They tended to act on impulse. The majority of addicts did not fall clearly into either the neurotic or character disorder groups, but had characteristics of both classes.

Often the drug abuse prone child comes from a home in which he cannot get approval. This may be because of parents' preoccupation with their jobs or careers or because of the absence from the home of one or both parents as a result of death, desertion or temporary separation. The adolescent child must know that his parents care for him if he is to be emotionally secure. Many boys who succumb to drug abuse come from homes where a woman is the major or only influential person. Boys lacking male leadership identify with their mothers, grandmothers, sisters or some other dominant female figure. This identification with an adult of the opposite sex leads to a sense of inadequacy and confusion about appropriate sexual role. It is of great importance in the development of a homosexual pattern of behavior. When identification is made with an outside male figure it too often is with an undesirable personality.

It is of interest to note that mothers frequently support the drug dependence of their sons, often unconsciously, by allowing them to steal the wherewithal for drug purchase. In narcotics treatment centers it is commonly observed that mothers bring their sons the money with which to obtain narcotics, despite the knowledge that this interferes with the chances of a cure. Such behavior emphasizes the abnormal relationship between mother and son. It is one in which the mother's attachment to the child maintains him in a dependent and even helpless condition.

[5] *What to Know About Drug Addiction,* by Harris Isbell, M.D.: Public Health Service Publication No. 94 (1951).

The home environment of the child who is likely to abuse drugs usually emphasizes failure, discouragement, and destructive criticism. There is an obvious relationship with the problems of family disintegration caused by poverty.

The opiates and other potent pain-relievers are wonderfully effective in their ability to change the patient's perception of and reaction to pain. The stimulant drugs, tranquilizers and hallucinogens also alter the user's preception of himself and his environment. These effects, which allow a person to escape from the reality of his situation, whether it involves pain, anxiety, or self-denigration, are sought by the person who is prone to become psychologically dependent on drugs. Even when the physical effects of the drugs -- nausea and vomiting for example -- are quite unpleasant; such persons find great satisfaction in the ability of these drugs to produce indifference, not only to actual pain, but also to all their emotional problems. As the youthful addict said, "It takes you away for a while."

Such persons find it extremely pleasant to "take off" and drift in a dreamy state in which all of their problems and conflicts cease to exist or at least cease to concern them. This euphoria, in which they can escape from reality, is what the drug abuser seeks when he takes anxiety-deadening drugs.

There are a number of factors which make adolescence a particularly vulnerable time for the beginning of drug use. It is a period when the youth is confused about his own feelings and about the standards of behavior set by his society; he is anxious to be accepted as a member of his group and looks for recognition of his new status; he feels new sex drives and new physical power; he is rebellious yet self-conscious. It is a time of great anxiety about the present and the future.

Adolescents thus may easily be influenced by their friends to try a drug which is in common use in their group. Alcohol abuse frequently occurs prior to drug abuse in these situations. To conform gains them group membership; to refuse makes them feel cast out, childish and cowardly.

Knowledge that the abuse of drugs is disapproved by parents and other adults makes its use attractive to the individual who is striving to free himself from his ties to home and parents.

The teen years are also a time of hero-worship, grand daydreams, and a continual expansion of the understanding of oneself and one's surroundings. As part of this interest in exploration and adventure, children at this time attempt many dangerous undertakings. Hitch-hiking, "riding the rails," exploring caves and climbing trees and roofs are frequent causes of injury.

Smoking corn-silk cigarettes was accepted as a sign of the "growing pains" of adolescence in rural America a century ago. For the past 50 years nearly every adolescent boy tried the effects of tobacco in one form or another. A single trial

of a marijuana cigarette, a sleeping pill or tranquilizer may represent nothing more than an extension of the process of exploration of the environment and the self. In the drug abuse prone child, the one who has been denied the emotional satisfaction he needs, however, this may introduce him to a "way out," an escape from reality.

Still it must be stressed that even with cough syrups laced with codeine, over a thousand potential nostrums advertised in the public press and peddled over the counters, and the ready accessibility of marijuana and barbiturates, drug abuse became a problem with only about one-fifth of one percent of the population. There must have been factors, therefore, which tended to limit drug dependence even when the availability of drugs was almost totally unrestricted.[6]

Scientific facts about drugs alone is hardly the answer since there is a comparatively high level of drug dependence among physicians. [7]

The feelings of personal success and worth accompanied by the ability to cope with frustration and conflict appear high in those individuals who "survived" the slum environment. In addition there is accumulating evidence that prolonged school experience enhanced or detracted from feelings of personal worth. Thus, the subtle and complex processes by which schools modify the concept of self as well as the concept of the world and one's place in it is generated by the teacher.

The primary weapon against drug abuse as a means to flee from reality, therefore, rests in training and recruiting quality teachers and administrators especially for schools serving disadvantaged areas.[8]

[6]Seaton, J. Kirk. "Narcotics and Alcohol Education . . . Are Facts Enough?" Address presented to Fourteenth Annual Workshop, N. J. State Federation District Boards of Education, October 21, 1966.

[7]Winick, Charles. "Epidemiology of Narcotic Use" in "Narcotics," Daniel M. Wilner and Gene G. Kassebaum, eds.; McGraw-Hill, 1965, p. 13.

[8]Seaton, J. Kirk. *op. cit.*, p. 7.

CHAPTER VI

SUSPICION AND RECOGNITION

Individuals dependent on drugs which create physiological dependence suffer withdrawal illness when their supply of the drug is terminated. Identification of these persons is made through close observation by a physician. Certain laboratory tests can be used effectively to corroborate his findings. If, however, an addict is receiving sufficient amounts of the drug, recognition is doubtful and unless he admits to his addiction, it seems unlikely that he will be identified. Admittedly, it is difficult to recognize even the most bizarre symptoms of withdrawal and often the drug is such that none of these manifestations occur. Therefore, teachers are hardly prepared to recognize drug abuse. Even if the teacher could identify the withdrawal syndrome, the symptoms themselves are often misleading.

The possession of the devices such as hypodermic syringe, hypodermic needle, blackened or charred spoon, makeshift eyedropper syringes, which are the hallmarks of the hardened addict, may be some basis for suspicion and are cause for investigation. Scars on the arms of a student should cause suspicion, though they may, of course, have innocent origins. They should never be considered prima facie evidence labelling anyone as an addict. Irresponsible acts of this nature can cause serious harm to innocent people. Such decisions should be made by competent medical authorities, not by educators.

Most school age drug abusers today are not using drugs which produce noticeable withdrawal symptoms or which require the related paraphernalia that provoke suspicion.

Drug abuse among young people today is a concatenation of factors; social, cultural, psychological and possibly physiological which require disciplined scientific investigation. There are traits of character, personality and physiology, which predispose some individuals to habituation while others are seemingly resistant. Attempts to delineate the "drug addict personality" have been numerous. Varying opinions prevent the drawing of any consistent picture. The obscure etiology of drug abuse makes early recognition of the drug dependent student difficult.

As was discussed in Chapter V, the adverse effects of poor home conditions including undesirable family relationships is familiar to most. Indifferent attitudes to drug use and proximity to drug users are of great import. Easy availability of certain substances makes it possible for younger children to indulge. "Airplane" glue, lighter fluid, gasoline, nutmeg and ether have all been implicated.

The teacher is in a strategic position to observe and evaluate deviant behavior, especially a marked change from previously known characteristics. Assessment of educational disability and investigation of cogent reasons for poor academic performance are the inherent responsibilities of the teacher. These phenomena most frequently accompany drug abuse. It is, therefore, vital that teachers be sensitive to obvious changes in the behavior of students.

General Traits

The drug abuser is often immature and dependent, seeking a sense of belonging. He feels out of place and is uncomfortable with classmates and teachers. He and his clique may use a strange jargon (see Appendix D, Glossary of Terms). Dress may be unkempt and slovenly. Frequent visitations to the toilet, nurse or infirmary may be prompted by unusual thirst or excessive expectoration.

The drug abuser finds it difficult to compete and excel in life. It is often hard for him to exist. He is impulsive, demands immediate gratification of his needs, and is racked with anxieties and tensions. He lacks direction and goals in life. He has low social interest and finds the world a hostile and dangerous place.[1]

In general drug abusers develop blurred memory, they seem to lose willpower, find it difficult to concentrate, think and reason. Their ambition dissipates and their major goal becomes getting drugs. Honesty disappears and they soon become accomplished liars. They stop using their minds for normal thinking and behavior.

While the average teacher may seldom see a young drug abuser in his class, he should be alerted to the extent to which such possibility exists in all strata of our society. This deviant behavior represents a general pathological response to inner and outer stresses with which young people cannot cope. The origins are complex and much remains unknown. Early recognition of drug abuse is a difficult task although hopefully not an insurmountable one. Its prevention is a challenge to the creative aspects of the teaching profession.

[1] Lombard, D. N. and Isele, F. W. "Heroin and Goofballs," Seton Hall University. An article submitted to NJEA for publication.

Some Specific Symptoms of Possible Drug Use and Abuse

Marijuana – Slang Names: Pot, Grass, Tea, Weed, Acapulco Gold, Joints, Sticks, Reefers, Roaches, Mary Jane, Muggles, Mooters, Gage, Indian Hay, Loco Weed, Mu, Giggle-smoke, Mohasky, Hash.

Observable symptoms:
- hilarity
- carelessness
- distortion of sensation and perception
- impairment of judgement and memory
- irritability and confusion

Additional physiological and psychological effects:
- inability to coordinate movements (ataxia)
- amounts of glucose in blood lowered
- over-all body temperature lowered
- increased appetite and desire for sweets
- inflamation of mucous membrane

Amphetamines – Slang Names: Speed, Pep pills, Dexies, Ups, Bennies, Drivers, Crossroads, Footballs, Co-pilots, Hearts, Crystal.

Observable symptoms:
- excitability
- tremor of the hands
- talkativeness
- restlessness
- enlarged pupils
- heavy perspiration

Additional physiological and psychological effects:
- sleeplessness
- high blood pressure
- abnormal heart beat
- heart attack possible
- suicidal tendencies

Barbiturates – Slang Names: Downs, Barbs, Redbirds, Yellowjackets, Blue heavens, Goofballs, Red devils, Reds, Pinks, Seggy, Rainbows, Red and Blues, Double trouble, Blues, Blue birds, Blue devils, Nimbies, Seccy, Yellows.

Observable symptoms:
- slurred speech
- staggering
- loss of balance and falling

– quick temper
– a quarrelsome disposition
– coma or deep sleep
– sluggishness

Additional physiological and psychological effects:
– changes in blood pressure
– insomnia
– possible convulsions
– mental confusion
– delirium
– hallucinations
– exhaustion

Hallucinogens – Slang Names: LSD, Acid, Cubes, Big D, DMT, STP, Peace pill.

Observable symptoms:
– dilated pupils
– trembling
– sweating of the hands
– chills, flushes and irregular breathing
– nausea
– panic

Additional physiological and psychological effects:
– hallucinations
– distortion and intensification of color and sound perception
– personality changes
– loss of sanity
– impulses toward violence
– impulses toward suicidal acts
– psychosis
– increase in blood pressure, heart rate, and blood sugar

Deliriants – Airplane glue, Gasoline, Lighter fluid, Paint thinner, Freon, Underarm deodorant, Marker fluid, Liquid shoe polish, Tire patch cement.

Observable symptoms:
– inflamed eyes
– dizziness
– slurred speech
– staggering
– intoxication
– irritability

Additional physiological and psychological effects:
- possible loss of consciousness
- may engage in rash, foolish and even dangerous actions
- has irritated nose and lung tissue
- loses appetite and weight
- feels constantly sick

Codeine – Slang Name: Schoolboy

Observable symptoms:
- dazed
- act mildly intoxicated

Additional physiological and psychological effects:
- perception dulls
- attention strays
- become unaware of surroundings
- possible convulsions

Cocaine – Slang Names: C, Coke, Snow, The Leaf

Observable symptoms:
- alert and perceptive
- physical reactions are sharp
- panting
- dilated pupils
- feeling of exhiliration and well being

Additional physiological and psychological effects:
- quickened pulse
- acceleration of circulation
- overconfidence in one's capacities and physical strength
- possible hallucinations
- feelings of persecution
- Vertigo
- mental confusion
- depression
- nervous exhaustion
- possible convulsions and death

Heroin – Slang Names: H, Horse, Hard stuff, White stuff, Junk, Smack, Snow.

Observable symptoms:
- flushed face
- constricted pupils
- dazed

– stare into space dreamily
– drift into a somnolence trance (sleep)

Additional physiological and psychological effects:
– euphoria (sense of well being)
– senses blunted
– stupor
– coma

CHAPTER VII

SOCIAL EFFECTS

The continued use of narcotics and other harmful substances debilitate productive lives. It often results in lowering of academic efficiency and causes eventual school dropout, loss of jobs, motor vehicle accidents, accidental poisoning, delinquent activity and crime. Many communities are concerned with these problems but are inadequately prepared to cope with them particularly from the educational, medical and rehabilitation standpoints. It is in these areas that much study, research and experimentation is needed before society can begin to successfully cope with the multifaceted enigma of drug abuse.

Delinquent Behavior

When personal or family funds are exhausted due to the increased dose requirement of the addict coupled with the accompanying rise in the cost of the drug, the youthful abuser must find other means to finance his addiction. Boys generally resort to stealing and girls to prostitution to obtain the urgently needed money. This behavior ultimately becomes a law enforcement problem and it is not until they have been apprehended that their use of drugs becomes known to the authorities. Most youthful addicts have engaged in delinquent activity before their experience with drugs.

School Dropout

Students using drugs often experience a gradual decline in their interest in school and eventual lowering of academic efficiency as they become more and more dependent on their abnormal flight from reality, and more and more involved in the "society" of drug sellers and users. They experience a deterioration of personal integrity and honesty. They will lie and cheat on exams until finally their inability to think and reason perceptively will necessitate the abandonment of school. Drugs become the most important thing in their lives. The skyrocketing cost of their "habit" may necessitate their eventual leaving school in order to take jobs to pay for their habituation or addiction.

Loss of Job

Although there has been no large scale study of the vocation of drug abusers, it can be logically concluded that most addicts are incapable of holding down a steady job. Occupational groups of jazz musicians, physicians and nurses have been studied and it was noted that a significant number of these individuals were

described as occasional or regular users of heroin, morphine or marijuana. One of the most common reasons for loss of job in a random sampling of occupations was absenteeism from place of employment.

Accidental Poisoning

Fatal and near-fatal poisoning from drug overdosages are common and are a consistent hazard to the drug abuser. Reports about barbiturate overdose, combination poisoning by alcohol and barbiturate and lethal heroin injections are seen frequently. Not all accidental poisoning can be termed as drug abuse – each year about 13,000 youngsters under the age of five are accidentally poisoned by aspirin – 125 of them die. In 1964 almost 16,000 children under five years of age were reported poisoned by drugs other than aspirin.

Motor Vehicle Accidents

Statistics are not available to prove that drugs cause a substantial increase in the motor vehicle accident rate. However, there is little doubt that they may contribute to them. Since driving requires a complex coordination of the physical and mental functions, any drug which has an effect upon the central nervous system may have a compromising effect upon driving. There are many drugs which affect the central nervous system altering the perception of time and distance. Some are legally prescribed by physicians for medical reasons. Stimulant drugs can produce tremor, instability, dizziness and combativeness; tranquilizers and antihistamines cause drowsiness; sedatives and hypnotics produce sleep; and often anti-biotics cause dizziness, drowsiness and mild euphoria. They obviously contribute to the dangers on the highways.[1]

The Family

Some of the effects of drug abuse upon the social institution of the family are clear. The addict is unproductive, unable to hold down a job, bleeds the family of resources, squanders money and possessions, and often ends in jail. He contributes little to the family. Court proceedings have often implicated drug abuse as an underlying cause of family breakup. The addict does not concern himself with breadwinning because all of his energy must be devoted to obtaining his next dose of withdrawal-preventing drug. He cannot fulfill his family role but brings only destructive qualities to his home.

[1]*Drug Abuse, A Manual for Law Enforcement Officers.* Smith, Kline and French Laboratories, Philadelphia. 1965

Crime

Former U.S. Attorney General Robert F. Kennedy stated in 1963 that illegal narcotics represented one of the greatest sources of income to the criminal world. The major supply of the world's narcotics is grown outside of the United States and legal importation is strictly limited. Illegal drugs are smuggled through the airports, seaports and border stations of the nation.

Crime syndicates realize huge profits from the illegal sale of narcotics. An original kilo (2.2 lbs.) of raw heroin bought for approximately $4,500 may ultimately retail for more than $300,000. One ounce of pure heroin, which may yield $70,000, takes less space than the ordinary cigarette package.

Probably less than five percent of the narcotics smuggled into this country is discovered at the point of entry. It is a nearly impossible task for federal customs and narcotic agents to patrol and survey all ports of entry, the thousands of miles of border and seacoast, and the millions of tons of goods passing into the United States each year. On an average day in New York City alone some thirty ships and more than eighty airliners arrive from foreign cities. Some 12,500 ships, carrying over a million passengers and 37 million tons of cargo arrive each year in New York City. It is obvious, then, that to check every movement of this vast transportation network, is virtually impossible. As one official of the United States Bureau of Customs put it, "We can't search all the travelers, take every car apart, or strip every boat and plane." It is conservatively estimated that 115 tons of heroin enter the United States illegally each year. The Bureau of Customs, during the fiscal year 1963-64, intercepted only 35 pounds of heroin.

The route of illicit drugs usually follows a pattern. Drugs which are grown and processed in foreign countries are diverted to an illegal market. A "contact" man turns the drugs over to smugglers. The drugs may be hidden on a ship or airplane which will reach the United States. The smugglers remove the drugs from the vehicle often adulterating it by adding inert material to it. The importer sells to the "wholesaler" who further adulterates it so that it is only about half drug and half filler. Distributors then sell to the peddler (pusher) who "cuts" it heavily before selling to the user. The profit potential is enormous. The original drug, approximately 87 percent pure, will go through some six to ten cutting down phases until it is only 3 to 5 percent of its original strength when it reaches the user.

Today, the United Nations Commission of Narcotic Drugs serves as an international coordinator to keep track of international legislation and other current narcotic problems. In this country the Federal Bureau of Narcotics, Immigration and Naturalization Service, Post Office Department, Bureau of Customs and the Secret Service, are the major agencies combating the illegal drug problem.

Once the drugs have entered our large cities the problem is very complicated. Police control rests largely upon detection of the peddler or user. The drug traffic is confined mainly to confirmed criminals who work in highly organized groups. They are quite willing to use violent means to preserve their profitable business.

The United States Bureau of Narcotics has administered a vigorous policy in controlling illicit narcotics traffic. The Bureau's attack upon the problem has centered on law enforcement and international cooperation. Their major adversaries have been the well organized racketeers who control the importing, wholesaling and distribution operation in this country. Actual sales of heroin to addicts are made by peddlers who are not generally members of crime syndicates, but are usually petty criminals concentrated in the metropolitan areas where addiction is most common.

The police problem is complicated by the fact that the drug may be only as large as an aspirin tablet. It may be hidden in such adulterated form that it is scarcely recognizable. It often will resemble familiar household or industrial compounds, even in its pure state.

Narcotic traffic and addiction, unlike other crimes, does not easily lend itself to statistical analysis. In crimes such as assault, auto theft or robbery there is usually a complaining victim who demands redress. Such complaints enable police to assess the number and location of specific crimes in a community and to direct their efforts accordingly. This is not the case with drug traffic and addiction where the principal victim is the user. The addict, driven by overpowering mental and physical forces, will protect the peddler in order to assure himself a regular supply. It is the antisocial and criminal acts which the addict must resort to in order to finance his habit that brings the problem to the attention of society.

Legitimate Drug Control:

Unlawful underworld traffic and abuse of illicit heroin and marijuana should not be confused with legitimate distribution of narcotics for medical use. It is generally recognized that of the drugs which are classified as narcotics under the law, heroin and marijuana are responsible for the vast majority of narcotic abuse. There is no medical use or legitimate manufacture and distribution of either of these drugs in the United States. Thus, they can only be obtained illicitly.

On the other hand, national and international studies and evaluations, as well as Congressional investigations have consistently found that there is very little diversion of medicinal narcotics from manufacturers and that there is no serious problem resulting from the availability, medical use, and occasional abuse of these legitimate drugs.

Through its interlocking system of permits, official narcotic order forms, and reports, the Federal Bureau of Narcotics controls medicinal narcotic drugs from the point of original manufacture to the point of delivery to the "registered" retail dealer, hospital, and physician. Each outlet in this ethical drug distribution center must be "registered," which require approval by both Federal and State governments. This elaborate and effective control system assures medical availability, with safety to the public, and prevents unnecessarily high costs.

CHAPTER VIII

TREATMENT AND REHABILITATION

The complexity of the underlying causes of drug abuse makes successful treatment very difficult. A review of Chapter V will make this clear. The variety of causes calls for a number of different approaches to treatment. Moreover, in almost all cases the abnormal behavior is based on personality defects which are determined in the early years of life. Such defects are difficult to change, even under ideal conditions. Where the educational background of the patient is weak, where society is antagonistic, and where there is a scarcity of well-trained professional therapists, hope of cure is remote. It is not surprising, therefore, to learn that cures are rare and that the improvement seen in individual patients is almost always temporary. Regardless of the therapy used, statistics indicate that fewer than ten percent of narcotic addicts are cured.

In most treatment centers, primary responsibility lies with the physician and, unfortunately, there is a shortage of physicians who have experience, skili, understanding and interest in this problem. In fact, few physicians, including psychiatrists, are interested in treating addicts.

The treatment of physical dependence generally requires that the patient remain in the hospital for a considerable length of time. Usually it takes four weeks to relieve the physical effects of withdrawal and to allow the beginning of psychotherapy, which may then be continued outside of the hospital, if suitable facilities exist. In spite of this, more than 40 percent of voluntary patients leave the hospital in less than two weeks.

Hospital facilities are being enlarged in many parts of the nation. In addition to the two federal institutions operated by the United States Public Health Service in Lexington, Kentucky and Fort Worth, Texas, psychiatric and other selected areas of some general hospitals are now available for the treatment of addicts.

In spite of the gloomy outlook herein portrayed any remission in drug abuse is a measure of success and our efforts must continue to be unremitting to bring about and extend periods of remission. The teacher can certainly help.

New Jersey Drug Addiction Treatment Program

In 1963 the New Jersey Legislature established the Narcotic Drug Study Commission. The Commission's recommendation was passed into law and signed by the governor on 17 December 1963 and is now Chapter 226, P.L. 1964.

The law calls for a program of multi-disciplinary effort of prevention, educa-

tion, psychiatric medical diagnosis, medically oriented aftercare community referral, vocational and social rehabilitation, and quasi-legal and legal control in the field of drug addiction. The legislation reflects the view that this drug addiction treatment program is primarily a socio-medical approach rather than the prevalent punitive-penal procedures and attitudes.

The act calls for one or more inpatient residential treatment centers to be established in existing state or county municipal institutions or as new separate facilities. The first of these centers was opened at the New Jersey Neuro-Psychiatric Institute at Princeton, June 15, 1965.[1]

New Jersey Drug Addiction Treatment Center

A residential treatment center for drug addicts has been established at the New Jersey Neuro-Psychiatric Institute at Princeton as part of a program recommended by the Narcotic Drug Study Commission of the State Legislature. On June 15, 1965 a 40-bed ward for men and 12-bed ward for women began accepting patients.

All patients are admitted to treatment voluntarily, although some are referred by magistrates under the Narcotic Act and the Dangerous Drugs Act. Persons convicted of offenses under these acts are given the option of serving a sentence in a penal institution or of volunteering for treatment. Those who choose this alternative receive suspended sentences and are placed on probation for a period of time estimated to be sufficient to allow for an effective treatment program including both in-patient treatment and aftercare.

Addicts who are not under legal restraint may also apply for admission to the treatment unit. They are considered for admission only if they agree to remain at least 45 days.

Patients receive thorough evaluation of their condition and needs before starting treatment. A psychiatric diagnosis is made on all admissions in addition to the diagnosis of drug addiction. Treatment is directed to overcome the effects of addiction and to relieve the underlying psychiatric problems.

In the first eight months of existence of the treatment unit, 272 patients were admitted and 250 discharged. Approximately half of the patients had been referred by a court.

Of the 250 patients discharged from the unit only 122 completed their pre-

[1]Drug Study Committee, *Addiction-Drugs and Treatment = Maturity.* New Jersey Welfare Council, Montclair, New Jersey October 1966, p. 23.

scribed course of treatment and even these patients had remained in the hospital an average of only four weeks. Eighty-five of these 122 patients had been referred by a court. The other 24 court-referred patients left treatment against the advice of the physicians.

The treatment plan of the New Jersey Drug Addiction Program depends on aftercare of the patient in his own home community after the completion of his stay in the hospital. Unfortunately, at present there are very few places in the State where the discharged patient can receive this service. Evaluation of the effectiveness of the Narcotic Treatment Unit is difficult to make after so short a time.

The Synanon Approach — Therapeutic Community

This is an approach used particularly by former addicts. Synanon was established by a recovered alcoholic with experience in Alcoholics Anonymous. There are now six Synanon centers, five on the west coast and one in New York. Their method of treatment involves "no chemicals" and "facing up to the truth." The basic element in their treatment is to subject the incoming addict to a form of group therapy where he is verbally attacked unmercifully by other addicts. This is done to point up the addict's weaknesses. The treatment is based on the belief that if the addict can solve his emotional problems, and survive the discipline-plus-self-discipline of the group he has a good chance of staying off drugs.[2]

Synanon conducts its program in communal living centers where self-improvement is also emphasized through education and cultural training. Usually long periods of residence are required; some former addicts remain there indefinitely.

There are many other therapeutic communities springing up throughout the country; i.e., Daytop Village, Renaissance House, Encounter House, Awareness House, etc. One major difference from the Synanon concept seems to be emerging. That is, allowing the addict to make a transition back to the "street." He is being urged to go back to normal living with the help of the "community."

Narcotics Anonymous

Members of this self-help organization, patterned after Alcoholics Anonymous, discuss common problems associated with drug abuse and attempts at abstinence. Chapters are located in a number of large cities with headquarters in New York City. It provides a program for rehabilitation of former addicts and offers group therapy to assist former users to abstain from use of drugs.

[2]*What We Can Do About Drug Abuse,* by Jules Saltman, Public Affairs Committee, Inc., New York, 1966, pp. 26-27.

Teen Challenge

Based on a religious theme, Teen Challenge originated from the work of Reverend David Wilkerson with teen-age addicts in New York City. Houses have been established in many sections of the country, especially in areas of heavy narcotics use. It has been successful in the rehabilitation of young addicts through the use of individual personality development techniques.

Halfway House

This is a program of rehabilitation and research planned to provide the ex-addict with a supporting home after his release from the hospital. Residential centers are located within the communities to which addicts return. They provide counseling, vocational training and medical assistance.

The "English" System

Although most experts in the field of drug abuse advocate methods of treatment and rehabilitation such as are described above, there are some who support another approach to the problem. They would make drugs available to addicts legally, with certain restrictions. This is known as the "English System" because it has been used in that country for some years. The primary aims of this program are to reduce crime related to illegal drug traffic by eliminating the need for an illegal source of drugs and to eliminate the crimes caused by the need of addicts to seek large sums of money for illicit drugs. It does not pretend to be a way to bring the addict back to a state of normal health.

Making drugs available in this way has not been effective in decreasing crime in England. Moreover, use of the method has been accompanied by a rise in the number of addicts in that country. There is evidence that the system will soon be discontinued there. Experience with a similar program in the United States in the early 1920's also was considered a failure and discontinued. The weakness of such a system is that while it makes procurement of drugs easier, it does nothing to decrease the pressure on certain individuals to use them. Moreover, the method has not produced its desired effect of decreasing drug-related crime.

Methadone Maintenance Program

Widespread interest in methadone has been created recently by the experimental program in which stabilization on methadone has been tried as a deterrent to heroin abuse. The drug has been given orally in solution once a day to selected patients and the dose increased gradually as tolerance develops until there appears to be no immediate effect of the daily dose and no craving for other narcotics. Under these circumstances the patient appears to be in a calm, relaxed state, freed of his anxieties and able to direct his attention to finding and holding a job

or to other normal activities. Having his craving satisfied, he does not seek heroin but whether or not his inclination to use other drugs is completely in abeyance is not yet clear. It must be remembered that the patients in this program have not been freed of their drug dependence. Methadone produces drug dependence of morphine type and the patients are dependent on methadone. Some of them have made satisfactory adjustments, have ceased their antisocial activities and appear to be on the way to rehabilitation. The outcome, if and when methadone is withdrawn, cannot be predicted at this time. Much more work needs to be done before there is wider application of the procedure especially by the private physician. Two conditions are vital: The drug must never be dispensed or prescribed for self-administration but the daily dose must be taken in the presence of the physician. The daily dose must be adjusted to the need of the particular patient and his development of tolerance and his drug intake must be constantly monitored by urinalysis.

Other treatment and rehabilitation resources:

1. United States Public Health Service Hospital, Lexington, Kentucky. Provides treatment program for narcotic addicts.

2. New Jersey Reformatory for Women, Clinton, New Jersey.
   Renders custodial care to adult female offenders following conviction, and committment by the Court, including violations of the narcotic drug act.

3. New Jersey Rehabilitation Commission Project for Drug Addicts, New Jersey Department of Labor and Industry, Trenton, New Jersey.
   Provides vocational rehabilitation to drug addicts in cooperation with the New Jersey Drug Addiction Program and other treatment agencies so as to insure a continuum of service.

4. Rahway State Prison, Rahway, New Jersey.
   Conducts regular monthly meetings to assist inmates in rehabilitation and to keep them informed concerning drug addiction on the street.

5. County Probation Department in each County.
   Supervises and rehabilitates probationers, and works in close cooperation with the New Jersey Drug Addiction Program, its treatment centers and after-care clinics, and with local agencies when probationers are or have been addicts.

6. Clinic for Drug Addicts, Bergen Pines County Hospital, Paramus, New Jersey.
   Serves as an After-Care Clinic for patients who have received in-patient treatment at the New Jersey Neuro-Psychiatric Institute, providing counseling and guidance by psychiatrists and a psychiatrist social worker. Also provides vocational rehabilitation and guidance. Probationers may submit urine specimens for testing for narcotic use by gas chromatography. This

is done in cooperation with the County Probation Department and the Prosecutor's Office. Additional services are job placement and correction of domestic problems.

7. Essex County Guidance Center, East Orange, New Jersey.
   Family centered, psychoanalytic orientation, providing individual and family psychiatric diagnosis and a wide range of treatment modalities for children and adults.

8. Essex County Overbrook Hospital, Cedar Grove, New Jersey.
   Receives on commitment patients who are sent in for in-patient psychiatric hospital care.

9. Family Service Bureau.
   Counsels individuals and groups, guidance to families in handling problems relating to drug abuse and emotional illness.

10. Mount Carmel Guild Narcotics Rehabilitation Center, Newark, New Jersey.
    Offers help, opportunity, purpose and experience to families and addicts through a program consisting of individual evaluation, individual counseling, group therapy, psychological evaluation, job opportunity, High-School Equivalency for school drop-outs, recreation, and referral service to other community resources.

11. Operation "We Care," Newark, New Jersey.
    A community action program designed to help the hard core unemployed person find ways in which they can help themselves. Operates on the theory that unemployment breeds crime, drug addiction, etc., the Center provides information and referral service, individual and group study services, educational and vocational guidance services and a recreation program.

12. Private, Newark, New Jersey.
    Medical consultant to the Sheriffs' Office for development of the Nalline Program and assists with the out-patient program of narcotic withdrawal through use of Mellaril.

13. The Well, Newark, New Jersey.
    Services include counseling, referral and residential facility for withdrawal.

14. Walter A. Quinn Narcotics Rehabilitation Program, Caldwell, New Jersey.
    Rehabilitates the narcotic addict and returns him to society as a useful citizen through efforts in group counseling, psychotherapy and follow-up.

15. Morrow Association on Correction – Special Project, New Brunswick, New Jersey.
    Upgrades job skills, provides remedial education, job placement for current releases bringing them into full contact with community resources.

16. Monmouth County Citizens Committee on Narcotics, Atlantic Highlands, New Jersey.
Provides assistance to narcotic addicts and their families at anytime.

17. St. Dismas Hospital and Treatment Center for Narcotic Addicts, Paterson, New Jersey.
Serves the rehabilitation needs of the addict, providing medical treatment and therapy to prevent the spread of contagion of the moral environment which breeds the addict.

18. Union County Narcotics Clinic, Elizabeth, New Jersey
Coordinates and cooperates with the Chief of Narcotics and other agencies, both state and community, to establish and implement a program to prevent drug addiction and to provide diagnosis, treatment, care and rehabilitation for drug addicts.

The Clinic also provides after-care treatment for patients discharged from the residential treatment center at New Jersey Neuro-Psychiatric Institute. It screens applicants for admission to the treatment center and provides a multi-service program consisting of individual and group therapy, job counseling and placement, educational therapy, occupational therapy and family counseling.

19. Citizens Aid Program, Elizabeth, New Jersey.
A 24 hour answering service to help addicts and their parents in distress. It is directed toward the non-criminal addict to prevent the stigma of notoriety by police record, newspaper publicity and community reaction.

20. Self-Help Program, Elizabeth, New Jersey.
Provides individual and group psychotherapy for sentenced inmates who are users and who volunteer for this program.[3]

The treatment of addicts in hospitals or other residential centers is only the first step towards rehabilitation. Usually it accomplishes physical recovery from the effects of the narcotic, so-called "detoxification" and it may also allow a beginning of a psychotherapeutic process aimed to correct the underlying personality defects which led to drug abuse.

The need for a protracted period of psychotherapy and for long-continued guidance indicates the importance of having treatment centers in the communities to which former addicts return. Such centers should also meet other needs

[3] *Ibid.*, pp. 13-22.

which may be present, such as the educational and vocational services which are required before the ex-addict can become a productive member of society. There may also be residual physical problems requiring care. Few communities in the United States offer all of these services to the former addict. Their lack almost guarantees that the former addict will succumb to the internal and external forces which drive him to the use of drugs.

CHAPTER IX

THE ROLE OF THE SCHOOL

Any claim that school instruction about narcotics and other harmful substances will provide a panacea for the drug abuse problem in society is unrealistic. Possibly it is a beginning in the quest for a solution. The present "cure" rate for those already abusing drugs is hardly encouraging and most competent authorities recognize the difficulty in keeping addicts off drugs even after undergoing painful withdrawal. The logical approach is to keep young people from starting.

There is some disagreement concerning preventive programs involving education about narcotics and other harmful substances. There are some who will argue that young people are likely to experiment with drugs after brief exposure to the subject in schools. This assumption is based upon testimony of addicts who revealed that cursory exposure in school motivated their curiosity and eventual use of drugs. It has also been argued that knowledge alone does not guarantee appropriate behavior and that it is therefore doubtful that education would eliminate or even reduce present youthful involvement. This view has been expressed by some law enforcement agencies who have had to shoulder much of the educational burden by presenting assembly programs and other "one shot" attempts at narcotics education in schools which fail to provide more complete instruction in the health education curriculum. Support for this position is also seen in the increase of addiction and drug abuse experienced in New York City since 1951 despite a comprehensive narcotic education program.

On the other hand, the late President Kennedy's Commission on Narcotic and Drug Abuse issued this charge to schools:

> "An education program focused on the teenagers is the *sine quo non* of any program to solve the social problem of drug abuse. The teenager should be made conscious of the full range of harmful effects, physical and psychological, that narcotics and dangerous drugs can produce. He should be made aware that although the use of a drug may be a temporary means of escape from the world about him, in the long run these drugs will destroy him and all that he aspires to. The education of the teenager is, therefore, an essential requisite of any prevention program."

Most states have statutes requiring instruction on narcotics and their effects upon the individual. The law in New Jersey is quite definitive and is quoted from *New Jersey Statutes Annotated, Title 18A, Education, 18A:35-4.*

"The nature of alcoholic drinks and narcotics and their effects upon the human system shall be taught in all schools supported wholly or in part by public

moneys in such manner as may be adapted to the age and understanding of the pupils and shall be emphasized in appropriate places of the curriculum sufficiently for a full and adequate treatment of the subject."

Source: R.S. 18:14-86, amended 1954, c. 81, s. 7.

The New Jersey Department of Education recommends an expansion of the narcotics instruction to include all dangerous and harmful substances.

Despite legislation by states, the White House Conference on Narcotic and Drug Abuse in September 1962 concluded:

> "The general public has not been informed of most of the important facts related to drug abuse and, therefore, has many misconceptions which are frightening and destructive. This situation is due to many causes, among which are the failure of our schools to recognize the problem and provide instruction of equal quantity and quality with that provided for other health hazards."

Some individuals feel that the sordid image of the addict, street pusher and criminal has made the schools reluctant to introduce the subject into the curriculum. It has been labeled as too controversial a subject – one that is fraught with potential dangers for both pupils and teachers.

Other deterrents have been lack of knowledge, training and interest on the part of many teachers and of the community. This lack of knowledge coupled with a distorted picture of addiction and all that it comprises, has led many communities, boards of education, school administrators and teachers to minimize any form of instruction about drug abuse. This decision conflicts with the aforementioned state statute and with the spirit of the Commission on Narcotic and Drug Abuse.

If education is to be considered as a preventive measure, a healthful school atmosphere with understanding and fully informed teachers and administrators is essential. In order to establish a well conceived, properly motivated and planned program of instruction, it is necessary to obtain the understanding, sanction and encouragement of the community, school board and authorities.

School Board Policy Statement

One of the most vital parts of any drug program carried out by schools is the formulation of a "policy statement." This is necessary so that all school personnel (students as well as employees), the local law enforcement agency, local health agencies, parents and community in general are aware of the role the

school will play in any drug problem. In other words, if a student is suspected or is actually caught using or possessing drugs in school, the school would have a plan of action. Also, any youngster who confides in a teacher could be counseled and referred for additional help.

Even though this is a "board policy," there must be community involvement in its formulation. The school has a vital role in counseling the student, but therapeutic help must be gotten elsewhere in the community if possible (it may have to make arrangements outside the community). The law enforcement agency must approve of the entire policy without taking punitative action against every student needing help. Unfortunately, if the pupils feel that the police are going to be involved in every case they will not seek out the school for help. Local health agencies may have the resources to offer therapeutic help. The parents need to know and accept all the ramifications if their child is involved with drugs.

All school personnel must be utilized in the policy. Some students may seek out a clerk or janitor to confide in. Procedures must be set up so that when a member of the staff becomes involved in a drug incident he knows the exact steps to follow. When should the administration be notified? When should the parents be notified? After the initial contact is made, who is the student referred to (nurse, school physician, school psychologist, guidance counselor, school social worker)? All of these questions must be considered.

While the entire school staff is vital to this program, the principal, school physician, school nurse, guidance counselor and teachers are the individuals most intimately involved with the observation, referral, guidance and instruction of the youngsters.

Principal

He is responsible for the effective management of the overall educational program and should assist in providing motivation, implementation and evaluation of the narcotic and dangerous drug program. He should make every effort to inform and include the home and community in the program. He should insure that the instruction complies with the state law and with the rules and regulations set forth by the State Board of Education. He should select properly certified, knowledgeable and motivated teachers for the instruction phase and provide for In-Service Programs for the faculty.

School Physician

Since he is trained to observe the signs and symptoms of abnormal behavior

and physical conditions, his major role is to inform the school staff about underlying causes, symptoms and characteristics of drug abuse; to confer with parents where symptoms indicate possible drug abuse and to aid in securing appropriate remedial services. He should act as a resource person to advise in the planning of curriculum, in the augmentation of materials and in the planning of appropriate programs.

School Nurse

Her role is that of advisor to both students and teachers and to act as liaison between school physician, school personnel, home and community agencies. She should exhibit a personal interest, sympathy and understanding toward students and their problems. She should act as a resource person in the In-Service Education of the faculty and as a part of the educational team to plan and implement programs about narcotics and dangerous drugs.

Guidance Counselor

Counselors are basically concerned with observing, studying and investigating behavior. While recognizing college placement for the qualified student as a significant role, their emphasis must also be upon the current problems of adjustment faced with varying success by all students. With some, difficulties in adaptation can be associated with the taking of drugs. They should strive to become well informed about the nature of dangerous and harmful substances. They should work in concert with the principal, school physician, school nurse and teachers in identifying pupil problems associated with drug involvement.

Teachers

Classroom teachers have many opportunities for close association with students on a regular basis and can recognize significant changes in appearance and behavior (discussed in Chapter VI). Pupil deviation from normal behavior patterns is a cause for concern and the alert teacher should seek assistance from the principal, school physician, school nurse and guidance counselor. Coaches and physical education instructors in particular, can observe students in various states of undress as well as noticing changes in physical characteristics and habits. Locker rooms provide opportunities for the exchange of marijuana and other drugs between students and therefore, should be properly supervised. Teachers should be alert as to the presence of strangers in or around school grounds particularly during lunch or recess periods and after school closes. These incidents should be brought to the immediate attention of the school principal.

School Committee on Narcotics and Dangerous Drugs

A school committee on narcotics and dangerous drugs should be comprised of the following:

1. Principal
2. School Physician
3. School Nurse
4. School Psychologist
5. Social Worker
6. School Psychiatrist
7. Curriculum Coordinator
8. Guidance Counselor
9. Health Education Teacher
10. Classroom Teacher

The purpose of this committee is to promote an atmosphere within the school environment which encourages an acceptance of all children and an understanding of their individual needs which when frustrated may lead to youthful drug involvement.

Its aim should be to provide techniques, procedures and materials to insure all school personnel are appraised of the drug abuse problem and that parents and the community are informed and involved in the program.

The major objectives of this committee are:

1. To insure that school personnel know and understand the predisposing factors leading to psychosocial maladjustments particularly those associated with drug abuse.
2. To develop techniques designed to promote early discovery of drug abusers presently in school. Suggested techniques:
   a. Cumulative records
   b. Health examinations
   c. Interviews of individuals
   d. Teacher observation
   e. Conferences (student-teacher-parent-guidance counselor)
   f. Personality ratings
   g. Report cards
   h. Extracurricular activities
3. To design procedures for teachers to follow if there is suspicion of drug involvement by a student.
4. To determine school procedures if referral and treatment are indicated.
5. To work with various divisions of the school system and health and welfare agencies in referrals.
6. To aid in coordinating the efforts of home and community agencies in understanding the problem of youthful drug involvement, and to help prevent and/or control it.
7. To develop faculty in-service education programs on narcotics and dangerous drug abuse emphasizing the role of the school in reducing a climate conducive to frustration and non-acceptance.

8. To develop parent and adult education programs on the nature and effects of narcotics and dangerous drugs.

9. To provide community orientation to the overall school program on this problem.

10. To review and develop with various divisions of the school system and health agencies appropriate materials on narcotics and dangerous drugs to be used in a planned program for all students.

11. To develop and implement an instructional program designed to promote appropriate student attitudes and behavior patterns related to the prevention of drug abuse.

Instructional Program

Education which is meaningful to students and which is capable of achieving the aims and objectives of the school system must, most logically, be planned by careful appraisal of the needs, interests and abilities of the children, the community and available resources.

The purpose of this document as stated in the Introduction *is to provide teachers with factual and reliable information concerning narcotics and dangerous drug abuse and its relationship to youthful involvement. It is not intended as a resource from which teachers can instruct students and therefore does not contain topical headings, grade level distribution, suggested activities, concepts to be developed, etc.*

However, the following general guidelines are suggested for the development of an instruction program:

1. Drug education should start in kindergarten. Information about why people use drugs should be given. Why "mommy" and "daddy" take pills or medicine. What role does the doctor and pharmacist play? Why can't everybody in the family take medicine prescribed for "mommy" and "daddy"? Why can't all the medicines in the medicine cabinet be mixed together and taken? Why do animals take different medicine than humans? Also, information about poisoning needs to be included (particularly plants that may grow in the back yard).

2. Drug education needs to be taught as a unit in an already established health curriculum, K-12. However, every teacher in the school should be knowledgeable about the "drug scene" so he can discuss the topic intelligently with his students. This knowledge also prepares him for the possibility that he may be the one that a "user" will confide in.

3. In formulating a curriculum, each community will need to decide for itself at what grade level abuse needs to be taught -- also, what drug is being abused. In some communities it may be glue sniffing (deliriants) in third grade; marijuana in sixth grade, or codeine in seventh grade. The range goes from deliriants, to pot, to pills, to LSD, to hard narcotics (heroin). The local district needs to determine what its problems are and at what grade level to place the emphasis.

4. The program should be presented to students by professionaly trained educators; special programs and speakers while augmenting classroom instruction *do not replace it.*

5. The major emphasis should deal with the concept that drug involvement can have a lifelong detrimental effect upon success in school, on the job, as part of a family and that there are serious consequences deleterious to one's health and happiness.

6. In addition, emphasis should be given to this behavior as the least satisfactory way to handle one's problems particularly those caused by anxiety or frustration.

7. A major task in the program is to develop the attitude among the students that self-administration of any drug without the direction of a physician is unwise and possibly dangerous.

8. Teacher methods are extremely important in drug education. Lines of communication with the students must be opened. There needs to be an interchange – a give and take – between student and teacher. Without this rapport, pupils who need the most help will "turn off" the teacher and merely go through the motions of getting a passing grade.

9. Presentation of drug information must be truthful and factual. Youngsters today are well versed on the "drug scene" and if they "catch" the teacher giving misinformation they will turn this to their advantage. They will take the teacher's role away from her and the student will become the expert. Then other students will turn to him for answers about drugs.

10. Teaching should reflect intelligent, sensible, and moderate approaches to the subject utilizing accurate facts and figures. "Scare" techniques and "preaching" methods have proved to be the least successful in making significant long term changes to youthful involvement. Conversely, they often motivate latent daring.

11. Teachers should equip themselves by attending workshops and institutes offered by colleges and universities, Department of Education, Department of Health, Federal Bureau of Narcotics and other agencies involved in the narcotic and drug abuse problem. Also the possibility of local in-service programs in Drug Education should be explored.

12. Procedures for self-evaluation of the program should be designed to appraise the effectiveness and suitability of the program in achieving the planned goals.

13. Provisions should be made to modify the program as changes in modern medicine, new research findings and self-evaluation studies indicate.

14. All A. V. materials used in the program must be previewed in advance to weed out poor materials. Some films are not factual and rely wholly on the scare technique. Some filmstrips and transparencies just skim the surface and have no substance to them. It can be an advantage to the teacher to utilize some of the students in previewing these materials. They can help point out the areas which would not ring true with the rest of the students.

Peer Group Pressure

One of the prime reasons teenagers turn to drugs is the pressure exerted by members of their peer group already on drugs. To fight this pressure, the local school district could start a peer group organization against drug use. Members would actively fight this "drug use" pressure by advocating the positive side of drug use; i.e., "It's stupid to use drugs!" "Get smart, stay away from drugs."

The initial recruitment for this group should be done by a member (or members) of the faculty who knows the "drug scene" and has good rapport with the students. As the group gets established all its activities should then be left up to the students, with the faculty member now becoming an adviser. A very important part of recruiting students is to involve those "on the drug scene" as well as the "do-gooders."

Quite often the students will not wish to meet on school property. Thus, community involvement is essential, and it will become necessary to use community resources. Also, there may be persons in the community with whom the students have rapport and it would be desirable to have them become a part of the group.

Some examples of this type of organization are:

- COY – Courage of Youth – Lenape Regional High School
- SLANT – Students League Against Narcotic Temptation – Hudson County
- Smart Set International – Los Angeles – their trade mark is SOS (Stamp Out Stupidity) and it has membership all over the world.

APPENDICES

Appendices A, B, and C were added to the basic text of this publication to suggest to the educational professional additional source material on the drug abuse problem. They were developed to provide more definitive dimensions beyond those examined in the preceding chapters.

Appendix D contains a glossary of terms characteristic of the jargon used by individuals associated with drug abuse. The glossary is designed to sensitize the educator to this communication phenomenon.

APPENDIX A

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APPENDIX B

*FILMS

1. *The Losers* – Produced and originally presented by WCBS-TV, New York, examines the prevalence of experimentation and the habitual use of chemical and drugs among youngsters from 12-21 years old. The investigation, which cuts across social and economic lines, includes actual experiences recounted by youths from the "high hazard" slums and from the "nice" neighborhoods.

   Clearly shown are the harmful effects of such practices as glue sniffing, use of pep pills, goof balls, heroin and marijuana.

   16 mm, sound, black and white, 31 minutes. Rental: Exclusive distribution by Carousel Films, Inc., 1501 Broadway, New York, New York 10036.

2. *Narcotic Addiction* – Kinescope of Medical Horizons telecast from the U. S. Public Health Service Hospital, Lexington, Kentucky. Black and white, 30 minutes. Free loan from Ideal Pictures Corporation, 321 W. 44th Street, New York City, New York 10036.

3. *Hooked* – A description of the experience of drug addiction told in the words of a group of young former addicts. Black and white, 20 minutes. Churchill Films, Los Angeles, California.

4. *Goof Balls and Tea,* 32 minutes, color; *Hardstuff,* 45 minutes, color. New Jersey Police Training Commission. Training films for law enforcement officers. Excellent general coverage of human involvement.

5. *Narcotics – Why Not?* – A series of extemporaneous interviews with teenagers and young adults who have taken narcotics. These individuals, residents of the California Rehabilitation Center, relate how they were introduced to narcotics, what it was like to be under the influence of narcotics, why they wished they hadn't used drugs or narcotics, and what the future holds for them. The misery of narcotics addiction, as related by these people, provides a vivid and memorable answer to the question in the film's title for teenagers and young adults who are increasingly exposed to the temptation of experimenting with drugs. Distributed by Charles Cahill & Associates Inc., P. O. Box 3220, Hollywood, California. 16mm, 15 minutes, color.

6. *Drug Addiction* – Shows the derivation of various drugs, the causes of drug addiction, the physiological effects of narcotics on the human body, and the treatment of drug addiction. Dramatizes the experiences of a physician addicted to heroin. Encyclopedia Britannica Films, 1952. Twenty-two minutes, black and white, 16 mm.

7. *Drugs and Nervous System* – An animated film showing the effects of drugs

on organs and body systems are surveyed. Explains disruption of the nervous system caused by abuse or misuse of certain drugs. Substances covered are airplane glue, amphetamines, barbiturates, opiates, marijuana and LSD. Color, 16 minutes. Churchill Films, Los Angeles, California.

8. *FDA Special Report: Drug Abuse – Bennies and Goofballs* – A documentary report on the proper use and misuse of two major classes of prescription drugs – the amphetamines and barbiturates. The film details the dangerous psychological and physiological effects of "pill-popping" and explains how new drug abuse control amendments will help control this trend. Free short term loan. Black and white, 20 minutes. Public Health Service Audiovisual Facility, Atlanta, Georgia.

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1. *Narcotic Addiction – Its Medical Management* – New York Academy of Medicine. Produced by WNYC-TV 1963. Black and white, 60 minutes.

2. *Subject Narcotics* – Narcotic Educational Foundation of America, 1645 N. La Brea Avenue, Los Angeles, California, Color, 25 minutes.

3. *Narcotic Addiction* – Ideal Pictures Corp., 321 W. 44th Street, New York, New York 10036.

*A film should always be previewed for content and appropriateness before it is used as a teaching stratogem.

APPENDIX C

INFORMATION SOURCES

Teachers should investigate the following sources for information and possible teaching materials.

1. Federal Bureau of Narcotics, Treasury Department, Washington, D. C. 20226.
2. U. S. Department of Health, Education and Welfare, Washington, D. C. – Food and Drug Administration.
3. New Jersey WCTU, 7 Martin Road, Verona, New Jersey 07044 – State Director of Narcotic Education.
4. Board of Education, City of New York, 110 Livingston Street, Brooklyn New York – several publications available.
5. Science Research Associates, Inc., 57 West Grand Avenue, Chicago, Illinois.
6. Public Affairs Committee, 22 E. 38th Street, New York 10016.
7. Narcotics Education, Inc., P. O. Box 4390, Washington, D. C.
8. American Medical Association, 535 N. Dearborn Street, Chicago, Illinois 60610.
9. Smith, Kline and French Laboratories, Philadelphia, Pennsylvania.
10. Commission on Narcotic Drugs, Economic and Social Council, United Nations, New York.
11. Division of Narcotic Drugs, World Health Organization, United Nations European Office, Geneva, Switzerland.
12. Addiction Research Center, U. S. Public Health Hospital, Lexington, Kentucky.
13. American Social Health Association, 1740 Broadway, New York, New York 10019.
14. Bureau of Drug Abuse Control, New York Field Office, 346 Broadway, 12th Floor, New York, New York 10013.
15. Federal Bureau of Narcotics Training School, Treasury Department, Washington, D. C. 20026.
16. National Institute of Mental Health, Bethesda, Maryland 20014.
17. New Jersey Drug Study Commission, State House, Trenton, New Jersey 08625

18. New Jersey Narcotics Advisory Council, 68 Central Avenue, Orange, New Jersey.

19. New Jersey Drug Addiction Program, 165 W. Hanover Street, Trenton, New Jersey.

20. New Jersey Parent's Association on Drug Addiction, P. O. Box 926, Newark, New Jersey.

21. New Jersey Pharmaceutical Association, 118 W. State Street, Trenton, New Jersey 08625.

22. New Jersey Sheriff's Association, Sheriff's Building, Bayard Street, New Brunswick, New Jersey.

23. New Jersey Welfare Council Drug Study Committee, 60 S. Fullerton Street, Montclair, New Jersey.

24. Merck Chemical Division, Merck & Company, Inc., Rahway, New Jersey 07065.

25. Essex County Chapter, Morrow Association on Correction, Dr. Sylvia Herz, Chairman, 220 Tillou Road, South Orange, New Jersey.

26. Essex County Study Committee on Narcotic Addiction, Metropolitan State Health District, 1100 Raymond Boulevard, Newark, New Jersey.

27. Newark Mayor's Committee on Youth, Gilbert Hunsinger, ACSW Secretary, 45 Brandford Place, Newark, New Jersey.

28. Seton Hall Medical School, South Orange, New Jersey.

29. Monmouth County Citizen's Committee on Narcotics, Mrs. G. Caracciola, 11 Leonard Avenue, Atlantic Highlands, New Jersey.

30. Monmouth County Chapter, Morrow Association on Correction, William O'Grady, Chairman, P. O. Box 236, Navesink, New Jersey.

31. Committee for Narcotics Prevention, Inc., Box 500, Morristown, New Jersey.

APPENDIX D

GLOSSARY OF TERMS

Bag – Small packet of narcotics
Bagman – The dealer, the pusher
Bang – Injection of narcotics
Bean – Capsule
Bennies – Benzedrine tablets
Bindle – Small amount of narcotics packaged in folded paper or envelope
Bombito – Vial of Desoxyn
Blast Party – Group of marijuana smokers smoking together
Blast a Stick – Smoke a marijuana cigarette
Blow a Stick – Same as above
Blue Heavens – Sodium Amytal tablets
Boy – Heroin
Bread – Money
Burn – To take money for heroin with no plans to deliver, stuff or phony drugs
Busted – Arrested
C – Cocaine
Caballo – Heroin
Cap – Capsule of narcotics
Champ – Junkie who won't inform no matter how sick he is
Charged Up – Under effect of narcotics
Chippy – Potential addict
Coke – Cocaine
Coked Up – Under influence of cocaine
Cokie – Cocaine addict
Cold Turkey – Abrupt withdrawal without medication
Connect – Make purchase of narcotics
Connection – Dealer in narcotics
Cook Up a Pill – Smoke opium
Cooker – Any spoon or bottle cap used in the preparation of heroin
Cop – Buy narcotics
Cotton Top, Cottonhead – User who recooks the cotton fibers found in cookers when their supply is used up and they are in need of an injection.
Cut – Adulterate narcotics
Deck – Small packet of narcotics
Dollies – Dolophine pills
DooJee – Heroin
Dope – Any narcotics
Dynamite – Narcotics of high potency
Eighth – Eighth of an ounce

Ends – Money
Fix – An injection
Fly – Take narcotics
Fuzz – Police, the law
Gimmicks – Equipment for injection by hypo needle
Goof Ball – Barbiturate
Grass – Marijuana in raw state
Gun – Hypodermic needle
H – Heroin
Hand-to-hand – Person-to-person delivery
Happy Dust – Cocaine
Hay – Marijuana
Heeled – Having narcotics
Hemp – Marijuana
High – Under the effect of narcotics
Holding – Possessing narcotics
Hooked – Addicted
Hop-head – Addict
Horse – Heroin
Hot Shot – Injection of poison which user believes to be good drugs
Joint – Marijuana cigarette
Jones – The habit, an addict
Joy Pop – A now and then injection, usually a skin injection
Junk – Narcotics
Junkie – Narcotics user
Kick – Break the dependence on a drug
Kilo – Large amount of narcotics
M – Morphine
Man – Policeman or detective
Main Liner – Addict who injects directly into veins
Manicure – Clean and prepare marijuana for rolling into cigarettes
Member – Negro or some other than white person
Monkey – Expensive habit
Off – No longer a user
Outfit – Eye dropper, cooker (spoon or bottle cap) used to prepare fix.
(See Tools or Works)
Pad – Drug user's home
Pack – Heroin
Piece – One ounce
Plant – Cache of narcotics
Pure – Pure narcotics of very good grade
Pop – An injection

Pot – Marijuana
Pusher – Narcotic seller
Quill – Folded matchbox cover or a paper soda straw for sniffing narcotics through the nose.
Rainbows – Tuinal capsules
Red Devils – Seconal capsules
Reefers – Marijuana cigarettes
Roach – Butt of a marijuana cigarette
Rumble – Police in the neighborhood; a shake-down or search
Satch Cotton – Cotton saturated with heroin
Scat – Heroin
Schmeck – Heroin
Scoring – Making a purchase of a drug
Script – Doctor's prescription
Set Up – An arrangement to have someone caught dealing in illegal drugs
Shoot Up – Take an injection
Shooting Gallery – Place where addicts congregate to take injection
Shot – Injection
Silk – A white person
Sixteenth – Sixteenth of an ounce
Sleigh Ride – Cocaine
Sniffing – Sniffing narcotics through nose, usually heroin or cocaine
Snorting – Same as sniffing
Snow – Cocaine
Speedball – A mixture of heroin and cocaine
Spike – Hypodermic needle
Spoon – Sixteenth of an ounce of heroin
Stash – Cache of narcotics
Stool – Informer
Stuff – Narcotics
Supplier – Drug source
Tecata – Heroin
Take a Band – Take drugs
Take-off – Take drugs
Taste – Small quantity of narcotics usually given as sample or as reward
Tea – Marijuana
Thoroughbred – Higher-type sellers who won't reveal anything about operation, one who sells pure narcotics
Tooies – Tuinal capsules
Tools or Works – Equipment used for injection by hypodermic
Toss – Search
Toxy – The smallest container of prepared opium

Weed – Marijuana
Weed-head – Addict
White Stuff – Heroin
Vic – One who has been given a hot shot, a victim
Yellow Jackets – Nembutal capsules
Yen Hook (Hock) – Instrument used in opium smoking
Yen Shee – Opium ash
Yen Shee Suey – Opium wine